

WORK SESSION AGENDA

**** A M E N D E D ****

**CITY COUNCIL WORK SESSION
TUESDAY
MAY 9, 2017**

**BOARD OF SUPERVISORS CHAMBERS
219 EAST CHERRY AVENUE
6:00 P.M.**

1. Call to Order

NOTICE OF OPTION TO RECESS INTO EXECUTIVE SESSION

Pursuant to A.R.S. §38-431.02, notice is hereby given to the members of the City Council and to the general public that, at this work session, the City Council may vote to go into executive session, which will not be open to the public, for legal advice and discussion with the City's attorneys for legal advice on any item listed on the following agenda, pursuant to A.R.S. §38-431.03(A)(3).

2. Pledge of Allegiance and Mission Statement

MISSION STATEMENT

The mission of the City of Flagstaff is to protect and enhance the quality of life for all.

3. Roll Call

NOTE: One or more Councilmembers may be in attendance telephonically or by other technological means.

MAYOR EVANS
VICE MAYOR WHELAN
COUNCILMEMBER BAROTZ
COUNCILMEMBER MCCARTHY

COUNCILMEMBER ODEGAARD
COUNCILMEMBER OVERTON
COUNCILMEMBER PUTZOVA

4. Preliminary Review of Draft Agenda for the May 16, 2017, City Council Meeting.*

** Public comment on draft agenda items may be taken under "Review of Draft Agenda Items" later in the meeting, at the discretion of the Mayor. Citizens wishing to speak on agenda items not specifically called out by the City Council for discussion under the second Review section may submit a speaker card for their items of interest to the recording clerk.*

5. Public Participation

Public Participation enables the public to address the council about items that are not on the prepared agenda. Public Participation appears on the agenda twice, at the beginning and at the end of the work session. You may speak at one or the other, but not both. Anyone wishing to comment at the meeting is asked to fill out a speaker card and submit it to the recording clerk. When the item comes up on the agenda, your name will be called. You may address the Council up to three times throughout the meeting, including comments made during Public

Participation. Please limit your remarks to three minutes per item to allow everyone to have an opportunity to speak. At the discretion of the Chair, ten or more persons present at the meeting and wishing to speak may appoint a representative who may have no more than fifteen minutes to speak.

6. 2017 Wildfire Awareness/Preparedness Briefing

7. Discussion: Street Lighting to Enhance Dark Skies (SLEDs) Status Update

8. Discussion and Direction: An ordinance adopting revisions to Title 13 of Flagstaff City Code entitled "Engineering Design and Construction Standards and Specifications for New Infrastructure."

9. Discussion and Direction: Updating the name of the Commission on Disability Awareness.

10. Discussion and Direction: Possible development incentive in the amount of \$2,500,000 to assist with the relocation of Soliere Avenue to support Vintage Partners, LLC's commercial development at I-40 and Country Club.

11. Discussion and Possible Direction: Current Issues Before the Arizona Legislature, Federal Issues and Administrative Items Before State Agencies.

12. Review of Draft Agenda Items for the May 16, 2017, City Council Meeting.*

** Public comment on draft agenda items will be taken at this time, at the discretion of the Mayor.*

13. Public Participation

14. Informational Items To/From Mayor, Council, and City Manager; future agenda item requests.

15. Adjournment

CERTIFICATE OF POSTING OF NOTICE

The undersigned hereby certifies that a copy of the foregoing notice was duly posted at Flagstaff City Hall on _____, at _____ a.m./p.m. in accordance with the statement filed by the City Council with the City Clerk.

Dated this _____ day of _____, 2017.

Elizabeth A. Burke, MMC, City Clerk

CITY OF FLAGSTAFF STAFF SUMMARY REPORT

To: The Honorable Mayor and Council
From: Paul Summerfelt, Wildland Fire Manager
Date: 04/27/2017
Meeting Date: 05/09/2017



TITLE

2017 Wildfire Awareness/Preparedness Briefing

RECOMMENDED ACTION:

Information only

EXECUTIVE SUMMARY:

The annual Wildfire briefing will present information on current/forecast conditions, staffing, and resource availability, and actions underway/planned to prepare for and respond to wildfires this summer in the greater Flagstaff area.

Presenters will include City of Flagstaff (Fire and Police), Coconino County (Emergency Management), and US Forest Service (Coconino National Forest).

INFORMATION:

Annual Wildfire season awareness and preparation is a year-round event involving many participants and partners. It is a Systems-based approach, involving Prevention, Preparedness, Hazard Mitigation, Suppression, and Recovery. The attached ppt program summarizes the plans, projects, jurisdictions, and staffing engaged in the effort, both within the City and with our adjacent partners.

Attachments: 2017 Wildfire Breif



WILDFIRE PREPAREDNESS BRIEFING

May 9, 2017

Paul Summerfelt – FFD
Sgt Ryan Coons – FPD
Todd Whitney – CCEM
Duane Tewa – USFS

... a system's approach



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Fire Season Factors

1. Drought
2. Fine Fuels Condition
3. Seasonal Temperature & Precipitation
4. Spring & early Summer Weather Pattern
5. Monsoon

2017 Bottom Line: ...no clear, highly certain, alignment of badness

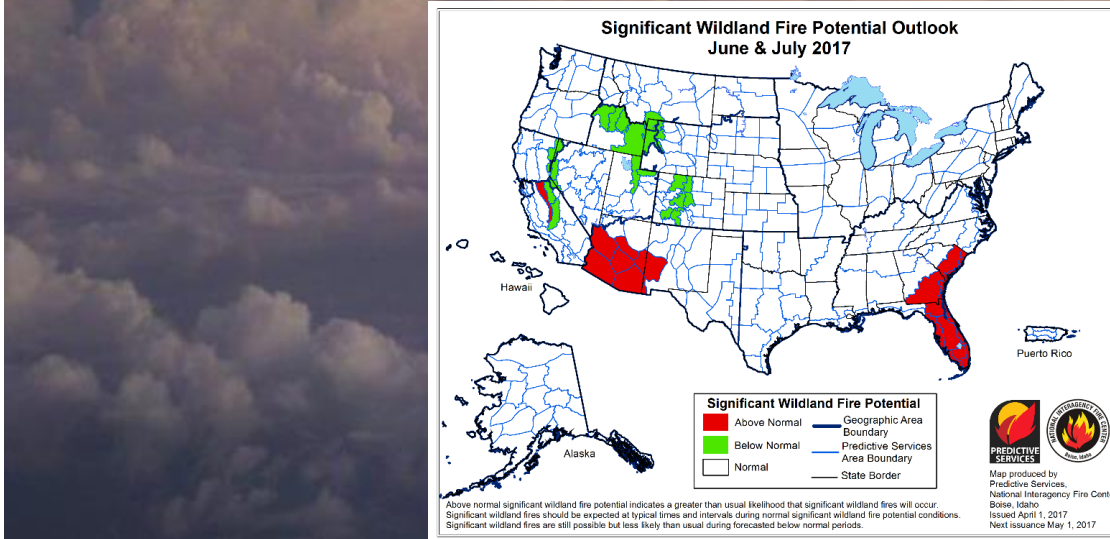
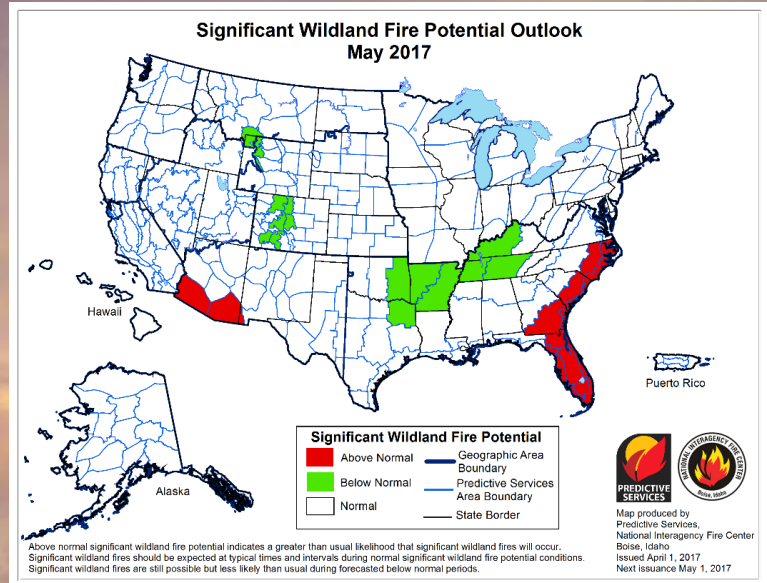
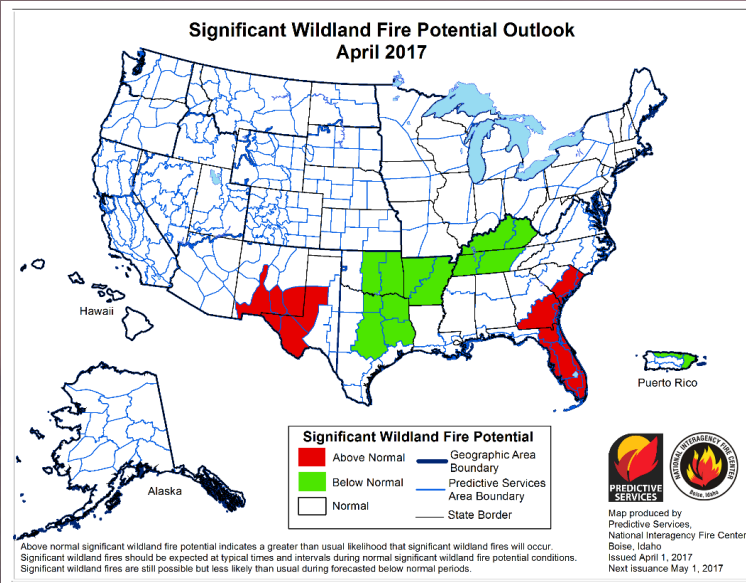


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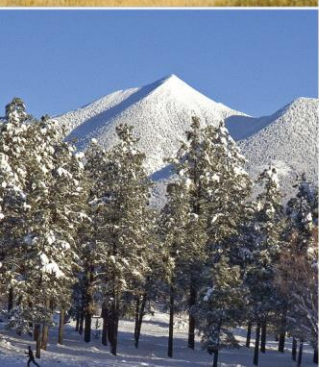


National Significant Wildland Fire Potential Outlook



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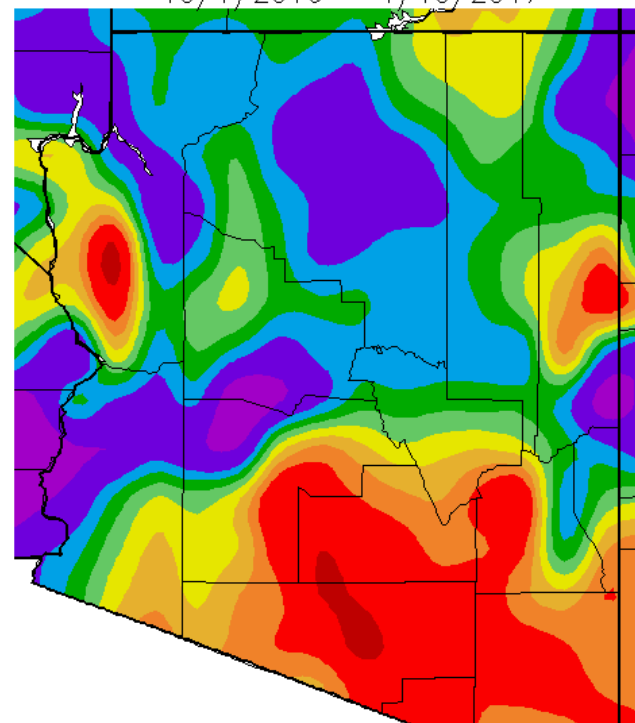


Precipitation Since Oct 1st (% of average)

Most of Northern
Arizona had *above
normal precipitation
over the past Winter.*

First time we've been
officially 'drought free'
in N. Arizona in almost a
decade (since early
2008).

Percent of Average Precipitation (%)
10/1/2016 – 4/10/2017



Generated 4/11/2017 at WRCC using provisional data.
NOAA Regional Climate Centers



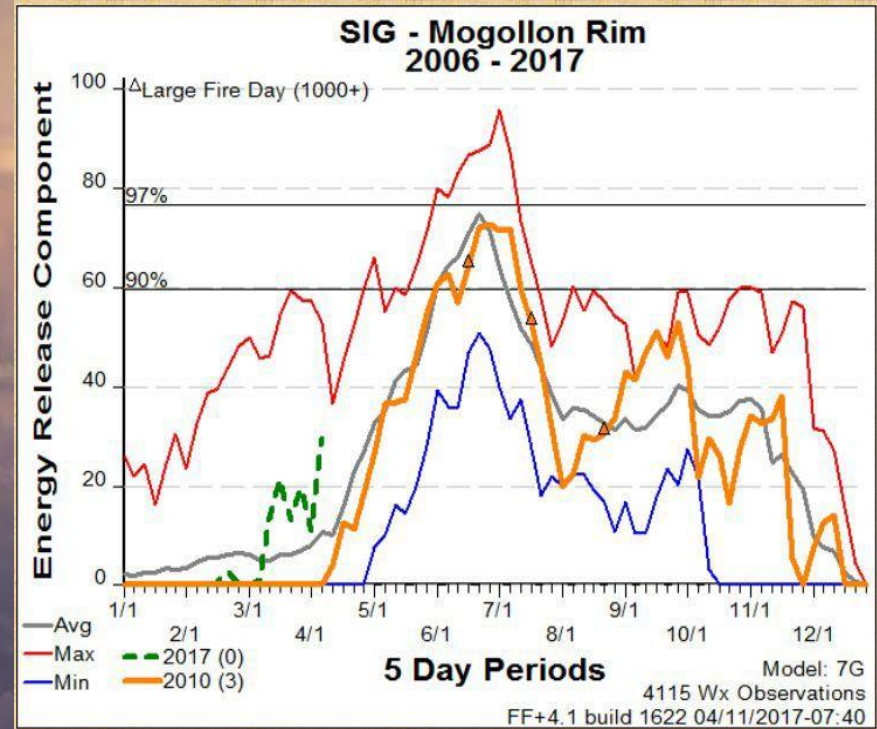
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Our Status & Readiness Posture

- We always have a fire season;
- Only questions are how long it will last and how intense it will be;
- Current indications are on par with an average year;
- We prepare the same every year;
- We are always ready.

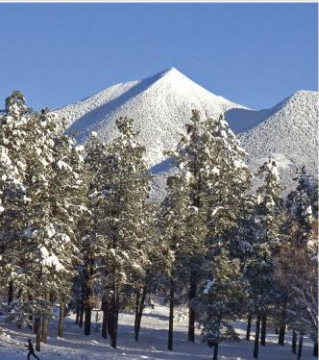
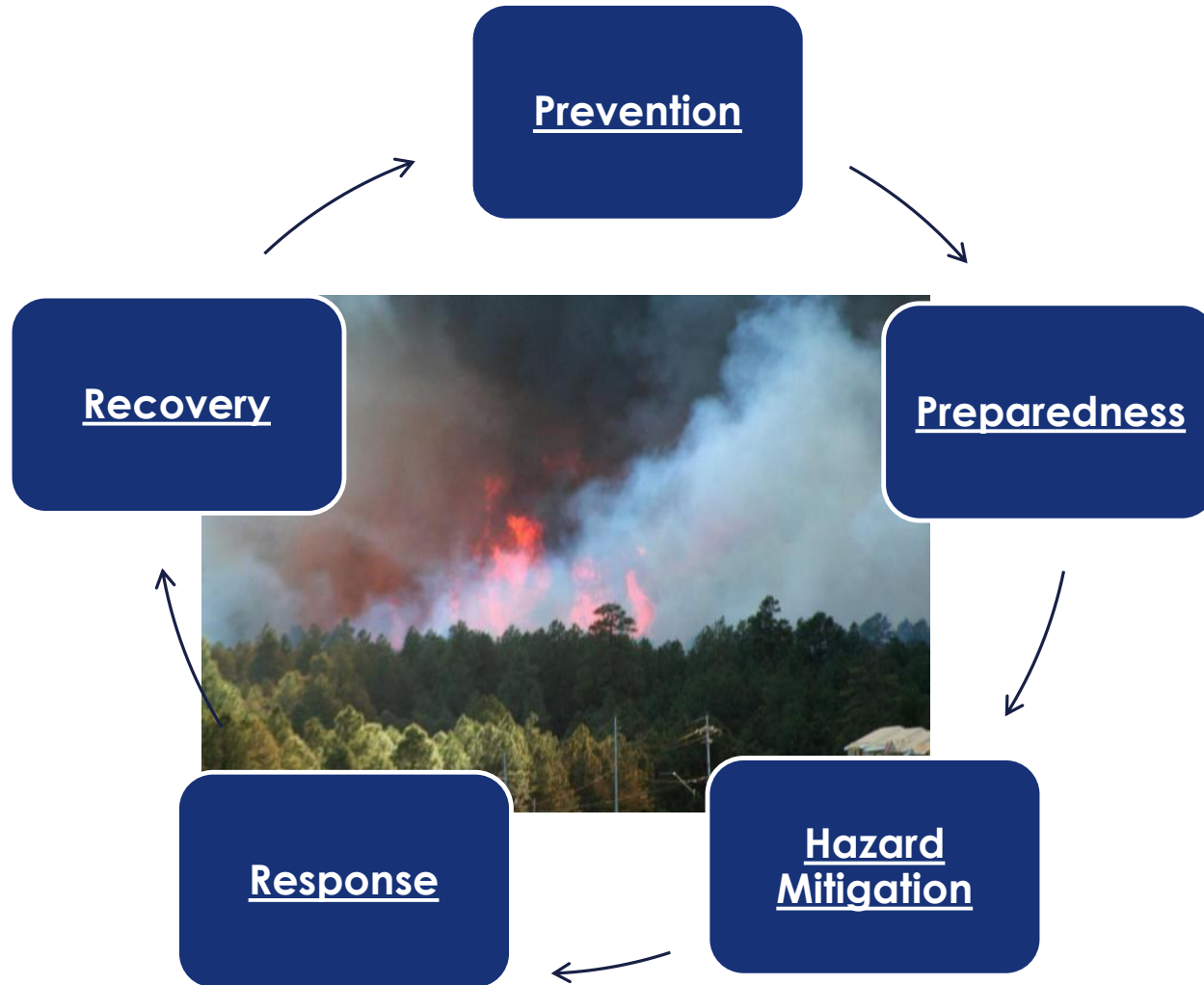


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The Wildland Fire Management Cycle



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2017 Focus Areas

• Prevention:

- *Shelter presentations & Woods Watch*
- *Joint patrols w/PD*

• Preparedness:

- *Wildfire Preparedness Day - May 6th*
- *Firewise Landscaping Contest & Luncheon - May 23rd*
- *Restrictions & Closure Plan*
 - ❖ *Weekly coordination calls & Preparedness Updates*
 - ❖ *Fireworks*

Fire Restrictions In Effect



No Fires



No Smoking



No BBQ's
(Charcoal or Wood)



www.flagstaffaz.gov

Per Flagstaff City Code Section 542-0910001 & 542-0910002



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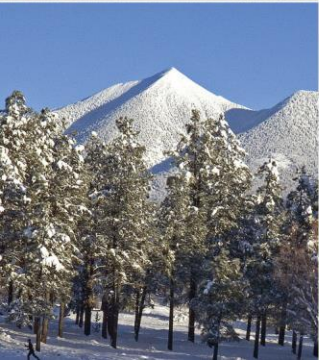
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2017 Focus Areas

- **Preparedness (cont):**
 - ***Training: AZ Wildfire Academy , local/regional efforts, and Annual Refresher***
- **Hazard Mitigation:**
 - ***Forest Treatments: Thinning, debris disposal, Rx fire***
- **Response:**
 - ***Line & City Crew 1***
 - ***Severity Unit(s)***
- **Recovery: as required**



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COLLABORATION & PARTNERSHIPS

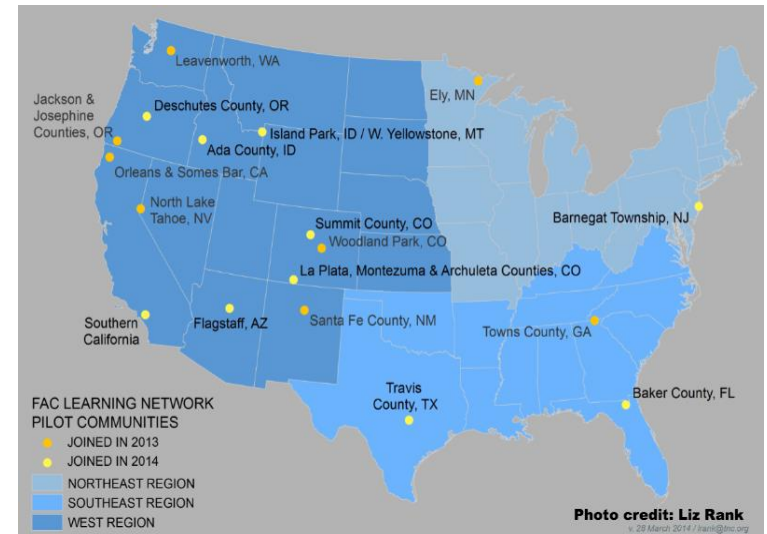


FLAGSTAFF WATERSHED PROTECTION PROJECT



**GREATER
FLAGSTAFF
FORESTS
PARTNERSHIP**
WWW.GFFP.ORG

***Fire Adapted Communities →
&
Fellow Fire Depts
(Ashland OR, North Lake Tahoe
CA, Austin TX, Boulder CO,
Santa Fe NM, Boise ID)***



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Law Enforcement Fire Prevention Patrols



- Proactive patrols typically start in May. This year, the PD began preparing for forest patrols in April
- Patrols begin when weather becomes more moderate due to a “Necessity” clause in the city camping ordinance
 - *Fire danger is lower during (most) winter months due to precipitation*



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Law Enforcement Fire Prevention Patrols

Patrol Efforts

- Early morning patrols in the wooded areas of Flagstaff to address illegal camping and campfires
- Night time flights looking for illegal campsites and campfires begin in coordination with fire restrictions
 - *Fire assets can be directed to the area by personnel on the flight*
- The Justice Assistance Grant will be used to pay overtime costs associated with evening flights
 - *1 officer daily for 2 - 3 hours*



**Evening air patrols
conducted with CCSO**



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Law Enforcement Fire Prevention Patrols

Woods Watch Volunteers

- The Woods Watch program will be coordinated with the Coconino County Sheriff's Office again this year
- The first training class was conducted in April at the LEAF.
- Woods Watch volunteers aid law enforcement by reporting violations of forest closure restrictions



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Wildfire Defense Ordinance

- Updated - May 2nd, 2017
 - Simplified language
 - Identified permitting for outside fire districts.
 - Cultural/Religious exemption.
 - Restriction defined- open fire cooking food with device.

Multi-Jurisdiction Hazard

Mitigation Plan 5 year Update

- Required for certain Federal disaster assistance grants and funding.
- Helps coordinate mitigation projects and future land use decisions.
- Update completed and submitted 2016.
 - Encompassed regional jurisdictions, unincorporated areas. (Coconino County City of Flagstaff Town of Fredonia City of Page Town of Tusayan City of Williams)
 - Wildfire, flood and earthquake and winter storms.

Emergency Operations Plan

- Developed in Bold Planning.
 - Incorporates regional jurisdictional partners.
 - The written document to support regional response and guidance.
 - Electronic copy is cloud based for ease of access.
 - Ongoing training activities should include exercising a portion of the EOP.



Coconino National Forest Fire and Aviation Management Program

▶ **2017 Chief's Letter of Intent...**

▶ ***“Continuing Commitment to Life First... ▶ Stop...Think...Talk...Act”***

- ▶ *Implement strategies and tactics that commit responders only to operations where and when they can be successful, and under conditions where important values actually at risk are protected with the least exposure necessary while maintaining relationships with the people we serve.*

Coconino NF

Restoration Efforts

- ▶ **Forest Plan Revision**
- ▶ **Four Forest Restoration Initiative**
- ▶ **Flagstaff Watershed Protection Project**
- ▶ **C. C. Cragin Reservoir**



FLAGSTAFF WATERSHED
PROTECTION PROJECT



Wildland Fire Dispatch

- ▶ **Coconino National Forest**
- ▶ **BIA Navajo and Hopi Agencies**
- ▶ **Flagstaff and Verde Valley Monuments**
- ▶ **PFAC and the Greater Flagstaff Area**





Fire Prevention Strategies

- **Education**
- **Patrols**
- **Severity**
- **Restrictions**





Wildfire Detection

- ▶ **Lookout Towers**
- ▶ **Aerial Detection**
- ▶ **Public**





Engines and Crews (USFS)

- ▶ **Engines (12)**
- ▶ **Crews (3)**
- ▶ **Water Tenders (4)**
- ▶ **Dozers (2)**
- ▶ **Misc. Overhead**





National Ground Resources

- ▶ **60 Interagency IMT**
- ▶ **113 Interagency Hotshot Crews**
- ▶ **10,000 Firefighters**
- ▶ **900 Engines**
- ▶ **Partners**
- ▶ **International**





National Air Resources

- ▶ **20 Large/Very Large Fixed-Winged Air tankers**
- ▶ **5 SEAT's in the SW in 2017**
- ▶ **28 Type 1 Helicopters, 33 Type 2 Helicopters**
- ▶ **13 Exclusive Use Helicopters in the SW**
- ▶ **Fixed Winged Fleet**





Questions ?



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25



CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To: The Honorable Mayor and Council
From: Jeff Bauman, Traffic Engineer
Date: 04/26/2017
Meeting Date: 05/09/2017



TITLE

Discussion: Street Lighting to Enhance Dark Skies (SLEDs) Status Update

RECOMMENDED ACTION:

This is a Project Update discussion item, no action is requested or required.

EXECUTIVE SUMMARY:

The SLEDs Project's primary objective is to find a solution to Flagstaff's current street lighting predicament while balancing dark skies, safety and maintenance/cost effectiveness objectives.

The SLEDs Project is the result of several years of discussions between the City and the local observatories (USNOFS and Lowell Observatory) that started in May 2012. At that time, the City found itself in a lighting predicament as Low Pressure Sodium (LPS), the preferred lighting source since 1989, was becoming increasingly more expensive to purchase, quality replacement parts were becoming more difficult to acquire and we were experiencing structural failures of the pole/mast arm connection due to the size and weight of the LPS fixture, especially in wind prone areas.

In June 2015, Council approved an Inter-Governmental Agreement (IGA) with ADOT to secure funding for the SLEDs Project. This was in the form of \$100K (FY16) to hire a Consultant Team (ultimately Monrad Engineering), \$200K (FY16) for test fixtures to support the Consultant Team's work, and \$256K (FY18) for the first phase of lighting replacements, all of the funding coming from the Flagstaff Metropolitan Planning Organization's (FMPO) Surface Transportation Program (STP).

The June 2015 Staff Summary Report concluded with "This SLEDs Project is an opportunity for Flagstaff to demonstrate to other municipalities an innovative lighting solution for dark sky preservation with Light Emitting Diode (LED) technology that achieves municipal objectives for safety and cost effectiveness and astronomical objectives for maintaining dark skies." That description is, of course, a partial and generalized list of priorities that the SLEDs Team is balancing.

The subsequent Request for Proposals (RFP) utilized to procure the best qualified Consultant Team has similar language to the Staff Summary Report:

"The City seeks cost effective replacement technologies that (1) maintain or approximate current lighting levels and (2) do not adversely impact the City's dark sky natural resource or the missions of the Lowell Observatory and the U.S. Naval Observatory. In consideration of cost effectiveness, the City seeks to utilize existing light pole infrastructure."

"Measures of Effectiveness may include:

- Light uniformity
- (1) Brightness and (2) spectrum analysis from several perspectives including:
 - On the street
 - At the observatories
 - General sky brightness
 - Identification of ambient light levels (i.e. absence of streetlights)
- Color rendition
- Wind loading (Effective Projected Area)
- Public commentary on lighting levels and color rendition
- Life cycle costs including, but not limited to, initial capital expense, energy use, and maintenance”

In September 2015, the Consultant Team, led by Monrad Engineering, was awarded a one year and \$100K contract to conduct applied research in order to develop a replacement strategy for the City’s increasingly obsolete LPS street lights with newer technology (LED). This contract has been modified to extend to March 2018 for a 30 month total duration and extended by \$41K to a total of \$141K.

PROJECT UPDATE:

The SLEDS Team has worked through several tasks to date:

- An assessment of the viability of continuing to use LPS
- A structural analysis of existing light pole/mast arm assembly and retrofit recommendation for existing poles/masts
- Pre-installation observations and measurements of “sky glow” of the Cheshire test area have been completed through ground, aerial and satellite measuring techniques
- Pre-test installation measurements of several Arterial and Major Collector corridors have been obtained to help in determining final locations for Test Fixtures.
- Test fixture recommendations divided into two categories
 - Arterials and selected Major Collectors
 - Selected Major Collectors, Minor Collectors and Local Roads
- Developed specifications for the Minor Collector / Residential Narrow Band Amber Light Emitting Diode (NBALED) test fixtures, Arterial Hybrid Light Emitting Diode (HLED) 80% NBALED/20% 2700K LED test fixtures and Arterial Narrow Band Amber Light Emitting Diode (NBALED) fixtures.

SLEDS Project items that are currently in progress:

- Working with Arizona Department of Transportation on SLEDS test fixture procurement
- Draft SLEDS Report

SLEDS Project next steps:

- Finalize procurement with ADOT
- Installation of test fixtures
 - Arterial and select Major Collectors - NBALED @ 12k lumens
 - Butler Avenue - Milton to Sawmill
 - Fourth Street - Route 66 to Industrial
 - Arterial and select Major Collectors - Hybrid LED @ 9k lumens
 - Butler Avenue - Sawmill to Ponderosa Parkway
 - Route 66 - Arrowhead to Fourth
 - Cedar at West signalized intersection
 - Residential Minor Collectors and Local Streets - NBALED @ 1500 lumens and 2500 lumens
 - Southern half of Cheshire
- Solicit public feedback on the test installations
- Field measurements of test installations

SLEDS project Final Steps:

- SLEDS Team meetings to discuss results of the test areas and begin developing proposed new City Engineering Standards for Street Lighting for eventual Council Adoption
- Establish City Wide replacement scenarios
 - Evaluate Life cycle costs for Alternatives including:
 - Initial capital expense
 - Energy use
 - Maintenance
 - Evaluate citywide lumen output for Alternatives
- Finalize SLEDS Project Report
- City Council Work Session/Regular Meeting to discuss SLEDS Team recommendations and consideration of Engineering Standards adoption.

INFORMATION:

COUNCIL GOALS:

TRANSPORTATION AND OTHER PUBLIC INFRASTRUCTURE

Deliver quality community assets and continue to advocate and implement a highly performing multi-modal transportation system.

ENVIRONMENTAL AND NATURAL RESOURCES

Actively manage and protect all environmental and natural resources.

REGIONAL PLAN:

Goal T.2. Improve transportation safety and efficiency for all modes.

Policy T.2.1. Design infrastructure to provide safe and efficient movement of vehicles, bicycles, and pedestrians.

Policy T.2.2. Consider new technologies in new and retrofitted transportation infrastructure.

Policy T.2.3. Provide safety programs and infrastructure to protect the most vulnerable travelers, including the young, elderly, mobility impaired, pedestrians, and bicyclists.

Goal T.3. Provide transportation infrastructure that is conducive to conservation, preservation, and development goals to avoid, minimize, or mitigate impacts on the natural and built environment.

Policy T.3.6. Seek to minimize the noise, vibration, dust, and light impacts of transportation projects on nearby land uses.

Goal T.4. Promote transportation infrastructure and services that enhance the quality of life of the communities within the region.

Goal T.5. Increase the availability and use of pedestrian infrastructure, including FUTS, as a critical element of a safe and livable community.

Policy T.5.2. Improve pedestrian visibility and safety and raise awareness of the benefits of walking

Goal T.6. Provide for bicycling as a safe and efficient means of transportation and recreation.

Goal E&C.5. Preserve dark skies as an unspoiled natural resource, basis for an important economic sector, and core element of community character.

Attachments: SLEDS RFP
 SLEDS Test Area Map
 PowerPoint

CITY OF FLAGSTAFF

REQUEST FOR PROPOSALS

SOLICITATION FOR: FMPO-STREET LIGHTING FOR ENHANCING DARK SKIES (SLEDs)

SOLICITATION NO.: 2015-69

CLOSING DATE AND TIME: Wednesday, July 15th, at 3:00 PM

WHERE TO SUBMIT PROPOSALS (“OFFERS”): Offers shall be submitted prior to the Closing Date and Time in a sealed envelope as addressed below:

Attention Buyer: Candace Schroeder, CPPB
SEALED OFFER: Solicitation No. 2015-69 Street Lighting for Enhancing
Dark Skies, (SLEDs)
Closing Date and Time: Wednesday, July 15th, 3:00 PM
City of Flagstaff, Management Services-Purchasing Division
211 West Aspen Avenue
Flagstaff, AZ 86001

CITY NEEDS: The City of Flagstaff seeks a qualified research team to evaluate the impact of different street lighting applications on its dark skies, a resource highly valued by the City and the community. The City seeks proposals to partner on the application or development of an innovative light fixture technology to replace the current LPS technology and is particularly interested in narrow band amber LED, phosphor-coated amber LED, and various filtered LED options. The City seeks proposals that effectively and appropriately mitigate the impacts of these lighting options on the community’s dark sky natural resource.

INFORMATION: The Solicitation and all related materials and any addenda may be downloaded from the City Website, www.flagstaffaz.gov.

BUYER: Candace Schroeder, CPPB, Telephone No.: (928) 213-2278, Facsimile No.: (928) 213-2209, Email Address: cschroeder@flagstaffaz.gov. If the Buyer cannot be immediately reached, you may contact the receptionist for the City Management Services Purchasing Division at (928) 213-2206.

PRE-OFFER MEETING: Wednesday, May 20, 2015 at 10:00 AM, Finance Conference Room, City Hall, Second Floor. A pre-proposal conference call will be held to answer questions. Members of the scoring panel will attend the teleconference to ensure all proposers have equal opportunity to present their questions and ideas to evaluators.

QUESTIONS: Any questions must be received by the Buyer via telephone, email, or facsimile at least five (5) calendar days prior to the Closing Date and Time.

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SOLICITATION DESCRIPTION

PURPOSE

The City of Flagstaff seeks a qualified research team to evaluate the impact of different street lighting applications on its dark skies, a resource highly valued by the City and the community.

BACKGROUND

Street lighting in Flagstaff

The city of Flagstaff was the first to be recognized by the International Dark Sky Association as an *International Dark Sky City*. Flagstaff earned this distinction, in part, by the establishment in 1989 of a lighting code and engineering standards specifying the use of low-pressure sodium (LPS) light fixtures for all roadway and parking lot lighting. Today, LPS lights are increasingly difficult to acquire as low demand has prompted many manufacturers and distributors to stop production. In addition, the use of the largest 180 watt LPS fixtures on the current poles and mast arms along arterial streets creates high wind loads. The City seeks proposals to partner on the application or development of an innovative light fixture technology to replace the current LPS technology and is particularly interested in narrow band amber LED, phosphor-coated amber LED, and various filtered LED options. The City seeks proposals that effectively and appropriately mitigate the impacts of these lighting options on the community's dark sky natural resource.

LED lighting relative to LPS

Flagstaff adopted LPS due to the very close proximity (2-10 miles from city limits) of major astronomical observatories established in 1894 (Lowell Observatory) and 1955 (the U. S. Naval Observatory). The low-pressure sodium spectrum covers 589-590 nm – only 1 nm spectral coverage. In contrast, the standard white LED spectrum has significant emission over more than 300 nm and filtered LEDs (FLED) over about 220 nm. Conversion of Flagstaff street lighting to 4100K CCT white LEDs has been estimated to increase sky glow by a factor of 7 relative to LPS, and conversion to FLED by a factor of 3.7, severely compromising the observatories' missions and greatly degrading the visual appearance of the night sky in the city.

Other LED options exist, however. Phosphor-coated amber LEDs (PCALED) has a narrower spectrum than FLED, cutting off at about 530 nm. True narrow band amber LEDs (NBALED) have only a 20nm bandpass centered near 590 nm; this is wider than LPS but entirely acceptable from an astronomical perspective. Filters that cut off the blue end of the spectrum at 550 nm (FLED550) create an LED option reasonably closely resembling high-pressure sodium (HPS, with a roughly 120nm bandpass). True narrow band LED options are also available at slightly redder wavelengths than amber (about 620 nm rather than 590 nm). See Figure 1 for representative spectra of some of these options.

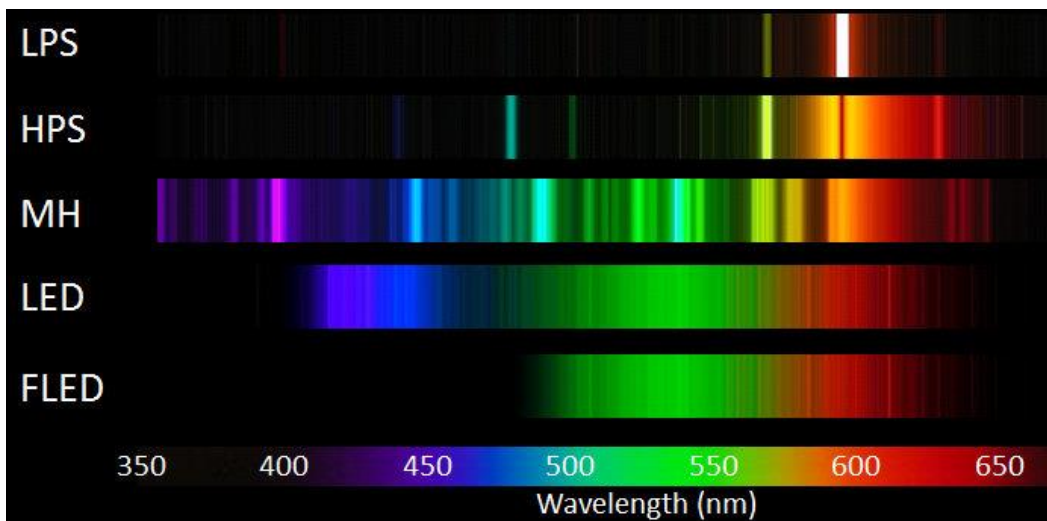


Figure 1. Representative lighting spectra. At present, Flagstaff is a mix of LPS and HPS, as over 50% of the city's street lights have been replaced by LPS since adoption of the 1989 ordinance. Metal halide (MH), LED, and FLED all result in dramatically increased sky glow relative to LPS or even HPS. (*Figure of spectral distributions prepared by Jeffrey Hall, Lowell Observatory*)

Challenges and opportunities presented by this RFP

At issue are the relative efficiencies of the lamps. NBALED is less efficient, at present, than FLED or white LED, making it less cost effective for citywide implementation. At the same time, it is the only LED option that preserves the current level of sky glow above the city. As an example scenario, if the City were to convert all its 180-watt LPS street lighting to NBALED and all of its HPS to FLED550, sky glow would be roughly conserved – but this solution would at present be extremely expensive.

We seek to identify how the City can affect a solution to this challenge. At the same time, we identify it as an opportunity for Flagstaff to demonstrate to other municipalities an innovative lighting solution for dark-sky preservation with LED technology. This entails:

- A cost effective solution to long-term street lighting needs that achieves municipal objectives for safety and cost effectiveness and astronomical objectives for maintaining dark skies.
- Innovation that advances the industry or best practices for technology transfer that advances the purpose of preserving dark skies.

PARAMETERS FOR PROPOSERS

Available funds

The Flagstaff Metropolitan Planning Organization has secured FHWA Surface Transportation Program funding to (1) conduct innovative research and monitoring, and (2) purchase new lighting technology, within the municipal region of the City of Flagstaff. This contract is subject to all federal compliance requirements set forth in 2CFR200, as administered through Arizona Department of Transportation.

The City will commit the following to the street lighting research collaborative:

- \$100,000 toward monitoring and research.*

- \$200,000 toward the purchase of light fixtures.*
 - It is the intent of the City to seek a phased approach to evaluating light fixture technologies by conducting small scale evaluations first to potentially eliminate some choices prior to purchases for the larger scale evaluations.
 - \$11,000 of in-kind labor for installation of lighting technology (in-kind).*
- (*The City's indirect cost allocation plan will be charged against all federal grant funding.)

General guidelines

- Proposals must support widespread applicability for the City's entire lighting inventory.
- Proposals must provide a clear plan and timeline for LPS to LED transition that maintains the City's dark-sky quality as new technology is implemented.
- Baseline data must be established across a range of measures of effectiveness.
- Proposals for modeling will not be accepted in the place of field testing, but existing evaluation or estimation software may be used for preliminary analysis during test designs and post-test estimates for city-wide impacts of new lighting recommendations.

The City is open to several ideas, including, but not limited to:

- Prototype – collaboration with a manufacturer to identify paths toward development of a cost-effective, narrow band LED replacement for a 180 Watt LPS fixture as the highest priority.
- Evaluation of selected corridors in the City for testing of one or multiple light sources including adaptive (i.e., time-of-day) technologies.
- Proof of concept: Using available models to predict light levels on the streets and changes in sky glow and under different scenarios employing varying amounts of lumens emitted by different lamps and fixture arrangements.

Measures of Effectiveness (MOE)

The City seeks cost-effective replacement technologies that (1) maintain or approximate current lighting levels and (2) do not adversely impact the City's dark-sky natural resource or the missions of the Lowell Observatory and the U.S. Naval Observatory. In consideration of cost effectiveness, the City seeks to utilize existing light pole infrastructure. Measures of effectiveness may include:

- Light uniformity
- (1) Brightness and (2) spectrum analysis from several perspectives, including:
 - on the street
 - at the observatories
 - general sky brightness
 - identification of ambient light levels (i.e., absence of streetlights)
- Color rendition
- Wind loading (Effective Projected Area)

- Public commentary on lighting levels and color rendition
- Life Cycle Costs including, but not limited to, initial capital expenses, energy use, and maintenance

INSTRUCTIONS

INSTRUCTIONS IN GENERAL

DUE DILIGENCE: It is your responsibility to examine the entire Solicitation prior to completing your offer, including the form of contract, City of Flagstaff Standard Terms and Conditions and Special Terms and Conditions.

INSPECTION OF WORK SITE: Before submitting an offer, you are required to inspect any work sites referenced in the Solicitation and notify the Buyer if you believe the work sites or conditions do not match the description found in the Solicitation or are unsafe.

PRE-OFFER MEETING: If a Pre-Offer Meeting is scheduled, you are strongly encouraged to attend. If scheduled, the date and time of this meeting will be indicated on the cover page of the Solicitation. The purpose of this meeting shall be to clarify the Solicitation in order to prevent any misunderstandings. Any questions, apparent omission or discrepancy should be presented to the City at this time. The City shall then determine the appropriate action necessary, if any, and issue a written amendment to the Solicitation. Oral statements or instructions shall not constitute an amendment to this Solicitation.

DISABILITIES: A person with a disability may request a reasonable accommodation in the Solicitation process by contacting the Buyer as early as possible to allow time to arrange the accommodation.

SUBMITTAL OF OFFER: Clearly label your offer as follows:

Attention Buyer: Candace Schroeder, CPPB
SEALED OFFER: Solicitation No. 2015-69 FMPO-Street Lighting for
Enhancing Dark Skies, (SLEDs)
Closing Date and Time: Wednesday, July 15th, 3:00 PM
City of Flagstaff, Management Services-Purchasing Division
211 West Aspen Avenue
Flagstaff, AZ 86001

on the outside of the sealed envelope. Submit **four (4) original hard copy and an electronic version in Adobe Acrobat ® (PDF) on either a compact disc or disc drive** of your offer in the sealed envelope (or box if needed) prior to the Closing Date and Time specified on the first page of the Solicitation. Submit your offer by mail or hand delivery to the address as labeled. Offers submitted by facsimile, email, telegraph or mailgram will not be considered.

COST OF OFFER: You are responsible for all costs related to preparation and submittal of an offer. The City will not reimburse any such costs.

LATE OFFERS: Late offers shall not be accepted. The City will return any late offers.

WITHDRAWAL OF OFFERS: You may withdraw an offer before the Closing Date and Time. A withdrawal must be signed by the vendor's authorized representative and submitted to the Buyer by hand delivery or mail.

OFFER ACCEPTANCE PERIOD: An offer made in response to this Solicitation shall be valid and irrevocable for ninety (90) days after the Closing Date and Time.

QUESTIONS: If you have any questions about this Solicitation, contact the Buyer. **The City will only respond to questions at least five (5) calendar days before the Closing Date and Time.** Questions should be submitted in writing. The Buyer may require you to submit any question in writing. Any question shall refer to the Solicitation number, page and paragraph number in question. The City **will not** be responsible if you adjust your offer based on any verbal statements made by employees or officers of the City, particularly if such statements conflict with the Solicitation. You may request the Buyer to issue an addendum to the Solicitation.

ADDENDA: The City will issue any interpretation or correction of the Solicitation only by written addendum and a copy of each addendum will be mailed, faxed or delivered only to those vendors who have returned an Acknowledgment of Receipt (form). Submit this form immediately. Addenda will also be posted on the City website.

RETURN OF SIGNED ADDENDA: You are required to sign and return each Addendum along with your offer. Failure to return a signed copy of each Addendum shall result in rejection of the offer.

IMPROPER CONTACT WITH CITY EMPLOYEES: All vendors submitting an offer (including the firm's employees, representatives, agents, lobbyists, attorneys, and subcontractors) will refrain from direct or indirect contact for the purpose of influencing or creating bias in the evaluation/selection process with any person who may play a part in the evaluation/selection process. This includes but is not limited to the evaluation committee, City Council Members, City Manager, Assistant City Manager(s), Deputy City Manager(s), Department Directors or other staff ("City Staff"). This policy is intended to create a level playing field for all potential firms, assure that contract decisions are made in public, and to protect the integrity of the selection process. Vendor is responsible for bringing all questions and concerns to the Buyer identified on Page One of this document. If the Buyer is unresponsive, the vendor may contact the City Manager. A vendor may be disqualified if the vendor: (a) contacts a quorum of the Council or contributes to an open meeting law violation; (b) offers political support or gratuities in exchange for approval or support of vendor's offer; (c) obtains information from City Staff not available to other vendors which may result in an unfair advantage in the competitive procurement process and fails to notify Buyer of this fact within 48 hours thereafter; or (d) engages in any other egregious conduct.

SAMPLES: If you are requested to provide sample materials to the City, all samples submitted shall become the property of the City for testing purposes and/or future comparison at no charge to City. Any sample not destroyed by testing or retained for future comparison will be returned to you. (You may be required to pick up the sample from the City).

PROCUREMENT PROCESS: The City's procurement process is described in the Procurement Code Manual, which can be accessed at <http://www.flagstaff.az.gov/index.aspx?nid=2991>. You are not required, but may review this Manual. The Solicitation is intended to provide all relevant information related to the procurement so that you may submit an offer. In the event of any conflict, the procedure outlined in this Solicitation will be followed or the conflict will be resolved by an Addendum.

CONTRACT WITH CITY

FORM OF CONTRACT: The City's proposed form of contract is included as part of this RFP for your review (**Attachment A**). The final form of contract will be conformed to match this Solicitation prior to Contract award.

INSURANCE: The City's insurance requirements can be accessed at <http://www.flagstaff.az.gov/index.aspx?nid=3054>. The insurance requirements are an explicit part of the Solicitation and any resulting contract with the City. Please see the attached **Exhibit C**.

STANDARD TERMS AND CONDITIONS: The City of Flagstaff Standard Terms and Conditions can be accessed at <http://www.flagstaff.az.gov/index.aspx?NID=3052> and are an explicit part of the Solicitation and any resulting contract with the City, unless otherwise specified in the Solicitation.

SPECIAL TERMS AND CONDITIONS: The City of Flagstaff Special Terms and Conditions (attached if applies) are an explicit part of the Solicitation and any resulting contract with the City.

EXCEPTIONS: You may request changes to the form of contract, insurance or any terms and conditions as part of your offer. (Use the Exceptions form)

CHANGES TO CONTRACT AFTER CONTRACT AWARD: Requests to change the contract after contract award, including but not limited to changes to insurance may be rejected by the City. The contract shall not be modified within the first year after contract award where: (a) an amendment may result in a competitive advantage that was not made available to other vendors; (b) requests for changes may delay commencement of performance.

FINANCIAL AND TAX CONSIDERATIONS FOR OFFER

QUANTITIES: Unless the Solicitation states otherwise (in the Solicitation Description or Special Terms and Conditions), the Contract will be non-exclusive, and the City makes no guarantees as to the quantities of materials or services to be purchased from a vendor.

PARTIAL AWARD: The City reserves the right to make multiple awards or to award by individual line item, by group of line items, or as a total, whichever is deemed most advantageous to the City.

ALL CHARGES: The offer should separately list all applicable fees, charges, and taxes. The failure to include such information may cause the City to consider the offer as non-responsive or non-responsible.

UNIT PRICES: Please check all math prior to submittal of your offer. If the offer unit prices do not correspond with the multiplied subtotal or total, the unit price shall prevail unless there is a blatant clerical error in the unit price.

PAYMENT: The City's standard form of contract provides that payment will be made within 30 days following receipt and acceptance of material/ service and a correct invoice.

DISCOUNTED PAYMENT: You may offer discounted pricing if the City pays in less than 30 days. If you offer discounted pricing, the payment discount period shall be computed from the date the City receives the material/service or correct invoice, whichever is later, to the date the City's warrant is mailed. Unless freight and other charges are itemized, any discount provided shall be taken on full amount of invoice. Payment discounts given for payment within ten (10) calendar days or more after City's receipt of the materials/service and correct invoice shall be deducted from the offer price when evaluating the offer. However, the City shall be entitled to take advantage of any payment discount offered by the offer provided payment is made within the discount period.

TRANSACTION PRIVILEGE (SALES)/USE TAX: State and local transaction privilege or use tax, as required, shall be indicated as a separate item on the offer. The State of Arizona and City of Flagstaff both impose a transaction privilege tax and use tax. Information concerning current tax rates can be found on the Arizona Department of Revenue website, www.azdor.gov. The City will not pay any taxes on invoices received unless an Arizona Transaction Privilege/Use Tax License Number is listed in the offer. The City also requires submittal of a City Business License Number from any vendor operating any portion of its business from a building located within City limits. The City will figure applicable taxes to offers received from out of state vendors who do not list an Arizona Transaction Privilege/Use Tax License number for tabulation and total cost evaluation.

FEDERAL EXCISE TAXES: The City is exempt from Federal Excise Tax, including the Federal Transportation Tax.

DELIVERY CHARGES: Delivery charges are considered non-taxable and exist only when the total charges to the ultimate customer or consumer include, as separately charged to the ultimate customer, charges for delivery to the ultimate consumer, whether the place of delivery is within or without the City, and when the taxpayer's books and records show the separate delivery charges. **Delivery charges if separately stated are considered to be non taxable.**

FREIGHT CHARGES: Freight charges for delivery from place of production or the manufacturer to the Proposer either directly or through a chain of wholesalers or jobbers or other middlemen are deemed "freight-in" and are not considered delivery. **Freight-in charges are taxable.**

EVALUATION OF OFFER AND CONTRACT AWARD

PROPOSAL MOST ADVANTAGEOUS TO THE CITY: The City will award a contract to a responsible and responsive vendor whose offer is the most satisfactory and advantageous to the City based on the Evaluation Criteria set forth in the Solicitation. Notwithstanding, any other provision of the RFP, the City reserves the right to waive any immaterial defect or informality; or reject any or all proposals or portions thereof; or reissue the RFP. A response to a RFP is an offer to contract with the City based upon the terms, conditions, and specifications contained in the City's RFP. Proposals do not become contracts unless and until they are formally executed as a separate contract document by the City (**See Attachment A – Sample Contract**).

EVALUATION CRITERIA: The following evaluation criteria will be used by the City's selection committee comprised of FMPO, City of Flagstaff, and representatives from the local observatories to score proposals based on the following:

The following evaluation criteria will be used for selection of a vendor.

RELATIVE IMPORTANCE

<u>EVALUATION CRITERIA</u>	<u>PERCENTAGE</u>
• Experience of the Team:	20 points
• Research Approach	40 points

- Creativity
- Effectiveness of MOEs
- Cost effectiveness of proposed work 15 points
- Residual Value to the City 15 points
- Transferability 10 points

TOTAL POINTS POSSIBLE **100**

EVALUATION PROCESS: The City of Flagstaff's evaluation committee will review the initial offers and score them according to the Evaluation Criteria. To evaluate these outcomes, the City will evaluate research collaboration proposals based on:

- Experience and qualifications of the research team.
- Identification of the best path forward to finding and implementing a resolution to lighting issues. The manner in which MOEs are identified and presented will be considered here.
- Cost effectiveness, and for teams including universities, clear identification of indirect or administrative overhead for grant or project management.
- Potential for residual value to the City – the degree to which the proposed research project may leave in place light fixtures and other material for use by the City.
- Potential for transferability – the degree to which the project can be applied and scaled to other communities, establishing Flagstaff as a precedent for dark-sky applications of LED technology.

The committee will then:

- a. Engage in discussions with highest scoring vendor. If the parties are unable to reach an agreement, the evaluation committee may engage in discussions with the second-highest scoring vendor.

Or

- b. Engage in discussions with the highest scoring vendors ("short list"). Following such discussions, the City may request such vendors to make "Best and Final" offers.

PURPOSE OF DISCUSSIONS: The purpose of discussions with a vendor (pursuant to Section 11.9 of the Procurement Code Manual) shall be to:

- a. Determine in greater detail such vendor's qualifications;
- b. Explore with the vendor the scope and nature of the project, the vendor's proposed presented approach, the relative utility of alternate methods of approach and method of performance;

- c. Determine that the vendor will make available the necessary personnel and facilities to perform within the required time;
- d. Agree upon compensation which is fair and reasonable, taking into account the estimated value of the required services/equipment, the scope and complexity of proposed project and nature of such services/equipment.

In conducting discussions, there shall be no disclosure of any information derived from offers submitted by competing vendors.

REVISIONS TO OFFERS: If the City calls for "best and final" offers, those vendors will be accorded fair and equal treatment with respect to any opportunity for discussion and revision of offers prior to contract award.

FINANCIAL STATUS: If requested by the City following the Closing Date and Time, you must provide a current audited financial statement, a current audited financial report, or a copy of a current federal income tax return. Failure or refusal to provide this information within five (5) business days after communication of the request by the City shall be sufficient grounds for the City to reject an offer, and/or to declare the offer as non-responsive or non-responsible.

REQUESTS FOR ADDITIONAL INFORMATION: After the Closing Date and Time, the City may request you to provide additional information related to your offer. Failure to provide this information within five (5) business days after communication of the request by the City will be grounds for the City to reject an offer, and/or to declare the offer as non-responsive or non-responsible.

RESERVATION OF RIGHTS: The City reserves the right to reject any and all offers, or any part thereof. The City reserves the right to accept any offer in whole or in part, or any line item, and to award a contract for purchase of the same. The City reserves the right to waive any clerical error or nonmaterial defect in the offer when it is deemed to be in the City's best interest. The City reserves the right to cancel or reissue a Solicitation.

NOTICE OF PROPOSED CONTRACT AWARD OR RECOMMENDATION: All vendors will receive an email notifying them of the City's proposed contract award or recommendation to reject all offers. This notice will be posted as part of the agenda for the regular meeting of the City Council, on the City website. The agenda is typically posted at least one (1) week prior to the Council Meeting.

PUBLIC RECORDS: Offers received by the City are available for public inspection after a contract has been awarded, subject to any confidentiality restrictions.

PROTESTS: If you wish to protest the Solicitation, a protest shall be in writing and shall be personally delivered or served upon the City Purchasing Director. A protest related to the Solicitation (such as specifications, requirements, or scope) shall be received by the City Purchasing Department before the Closing Date and Time. A protest of a proposed award or of an award shall be personally delivered or served upon the City Purchasing Director within ten (10) days after the protester knows or should have known the basis of the protest. A protest shall include:

- a. The name, address and telephone number of the protester;
- b. The signature of the protester or its representative;
- c. Identification of the solicitation or contract number;
- d. A detailed statement of the legal and factual grounds of the protest including copies of relevant documents; and
- e. The form of relief requested.

OFFER FORMAT

QUALITY OF OFFER: The City will evaluate the quality of the offer as evidence of your qualifications and competence. The offer should be: (1) complete, (2) thorough, (3) accurate, (4) comply with Solicitation instructions, (5) organized, and (6) concise.

PAGE LIMIT: The offer **shall not exceed a total of 20 pages**, except the Cover, Cover Letter, and City Forms will not be counted in the page limit. Any pages attached to the City Forms shall be counted toward the page limit. The City may reject an offer that exceeds the page limit as non-responsive.

NUMBER OF COPIES: Submit **FOUR (4) ORIGINAL HARD COPY AND AN ELECTRONIC VERSION IN ADOBE ACROBAT ® (PDF) ON EITHER A COMPACT DISC OR DISC DRIVE** of your offer. The original hard copy must be bound.

MATERIALS USED FOR OFFER: The offer must be submitted in packaging/packing materials that meet at least one of, and preferable all of the following criteria: (a) Made from 100% post-consumer recycled materials; (b) Non-toxic; (c) Bio-degradable; (d) Reusable; (e) Recyclable. The original hard copy should be printed on recycled paper (minimum 50% post-consumer waste) and printed double-sided.

OFFER FORMAT:

Cover:

The cover should contain the following:

- Solicitation Number
- Solicitation Name
- Closing Date and Time
- Company name (and logo if desired)
- Other information/graphics as desired

Tabbed Sections of Bound Proposal:

Cover Letter (1 page)

All proposals must follow the general guidelines and format outlined below exactly. Proposals that do not follow these criteria will be returned without review.

General guidelines

To ensure easy readability, proposals should use at least one-inch page margins and 12-point font of an easily legible font face. The content of Section 5.2.2 below, including all graphs, figures, and tables, may not exceed 20 pages.

Proposal contents

The proposal should present a plan to provide a comprehensive recommendation for a transition from legacy technology (LPS and HPS, and non-dark-sky-compliant lighting that may be in use in Flagstaff or other communities) to LED. The City of Flagstaff and Lowell

Observatory see this as an opportunity for proposers to devise an innovative solution to support municipal priorities while maintaining exemplary dark-sky practice and policy.

Title and Abstract

The first page of the proposal should provide a descriptive title and an abstract of no more than 300 words. The abstract should provide an effective summary statement of the problem addressed, identify the solution, and specify the objectives and methods of the proposed solution.

Project description

The project description must contain four sections in the order given below. These sections are designed to encourage a step-by-step evaluation of the evolution of an LED-based, dark-sky lighting solution in Flagstaff, and to create a roadmap for other communities that wish to embark on similar efforts. Proposers must source in the reference section all statements from the primary or secondary literature, case studies, and municipal codes and strategic plans.

Evaluation of lighting pole infrastructure in Flagstaff

As stated above, the City desires to maintain existing lighting pole infrastructure in the interest of cost effectiveness. Proposers should provide a plan and timeline for assessment of this infrastructure. The City will provide the selected team with its lighting pole inventory documentation for the purposes of this evaluation. Critical questions include

- Where mast arm overloading by 180 watt LPS fixtures is of critical urgency
- Where poles themselves require engineering or replacement

Evaluation of LPS lighting technology

Proposers must outline a plan to evaluate the state of low pressure sodium lighting in industry. This should include plans and a timeline to provide

- A review of LPS usage generally, showing usage trends and evolution of demand
- A projection for the future availability, cost, and efficiency of LPS lighting, to establish timescales on which LPS must be phased out in favor of LED

Evaluation of LED lighting options

The proposal must provide a plan for evaluation of LED lighting technology. Options that must be explored include but are not limited to:

- FLED (500 nm cutoff)
- PCALED (530 nm cutoff)
- FLED550 (550 nm cutoff)
- NBALED (20 nm band width at 590 nm)
- Other NBALED-analogous options (e.g., narrow band centered at 620-630 nm)

Parameters that must be evaluated are:

- Current efficiency
- Prospects and timescale for improvements in efficiency
- Cost implications to the City of implementation of the various options if it

- Replaces 180-watt LPS fixtures in critical engineering areas identified in section 5.2.2.1 above
 - Replaces all current 180-watt LPS fixtures citywide
 - Replaces additional HPS fixtures citywide
- Examination of hybrid solutions for LPS/HPS replacement is acceptable and welcomed

Plan for transition of lighting in Flagstaff from LPS/HPS to LED

Narrow band LED lighting preserves the viability and the missions of the local observatories. Proposers should describe a clear path to transitioning Flagstaff from LPS to dark-sky preserving LED. Elements of this plan should include, but are not limited to

- Maintenance of LPS through mechanical solutions (e.g., additional support of mast arms, removal of mast arms and attachment of fixtures directly to poles) while LED solutions are explored and implemented, and timescales for viability of such maintenance
- Temporary installation of broad-spectrum LED (e.g., FLED) in areas of critical urgency identified above while narrower band (PCALED, FLED550, NBALED, orange NBALED) options and improvements are explored
- Proposals for installation of the various types of LED options for public evaluation
- Timescale and limits of improvement in narrow band LED technology
- Plan for phased conversion of LPS and HPS streetlight fixtures to a mix of LED that maintains the dark sky standards in the city
- Projections for change in sky glow under the various scenarios presented

References cited

All references included in the Project Description should be assembled in an alphabetical list. Proposers may use a citation style of their choosing, but they should be consistent throughout the reference list.

Project personnel

Proposers should provide an explanation of the proposed personnel arrangements and the biographical data sheets for each of the main contributors to the project. The explanation should specify how many persons at what percentage of time and in what academic categories will be participating in the project. If the program is complex and involves people from multiple firms or institutions, the organization of the staff and the lines of responsibility must be made clear.

Budget and Budget Narrative

Proposers should present a budget including the following line items.

- Effort level and salary or hourly rate for all personnel involved in the project (FTE levels expected for exempt personnel, hours to be invested for non-exempt personnel).
- Total fringe benefits.
- Direct costs including but not limited to

- Travel and lodging
 - Computers, software, and software licenses
 - Equipment
 - Subcontracts and consultant fees
 - Supplies
 - Administrative costs
 - Indirect costs, accompanied by documentation of negotiated rate as appropriate.
 - A budget narrative of 1-2 pages should accompany the full budget.
- A. **Offer (form)** (attach signed Solicitation Addenda)
- B. **Vendor Questionnaire (form)** (attach copies of licenses)
- C. **References (form)**
- D. **Exceptions (form)** (attach information)
- E. **Confidential Materials (form)**
- F. **Cooperative Purchases (form)**
- G. **Disclosure (form); Declaration Related to Solvency (form); Declaration Related to Gratuities (form); Declaration of Non-Collusion (form)** (attach explanations)

All completed forms must be submitted with offer!

ACKNOWLEDGMENT OF RECEIPT AND REQUEST FOR ADDENDA (FORM)

**SOLICITATION FOR: FMPO-STREET LIGHTING FOR ENHANCING DARK SKIES,
(SLEDS)**

SOLICITATION NO.: 2015-69

CLOSING DATE AND TIME: Wednesday, July 15th, 3:00 PM

Please complete this form and return it to the City Buyer via e-mail at cschroeder@flagstaffaz.gov, facsimile at (928) 213-2209 or mail it to the Buyer at the address listed above to acknowledge your receipt of this Solicitation and **to receive notification of any addenda or responses to questions regarding this Solicitation.**

Company Name: _____

Name / Title of Contact: _____

Address: _____

Phone #: () _____ Fax #: () _____

E-Mail
Address: _____

Signature: _____ Date: _____

NO RESPONSE (FORM)

**SOLICITATION FOR: FMPO-STREET LIGHTING FOR ENHANCING DARK SKIES,
(SLEDs)**

SOLICITATION NO.: 2015-69

CLOSING DATE AND TIME: Wednesday, July 15th, 3:00 PM

If you are not responding to this Solicitation, please complete and return this form to the Buyer at the address listed above, fax to (928) 213-2209 or email to cschroeder@flagstaffaz.gov.

Company Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

Reason for NO OFFER:

- ☐ Do not provide the materials or services requested
- ☐ Unable to respond due to current staff availability and/or business conditions
- ☐ Insufficient time
- ☐ Unable to meet terms, conditions, specifications or requirements as described within the solicitation due to:

☐ Other: _____

This NO OFFER response is authorized by: _____

Signature

Title

- Please check one:
- ☐ Retain our company on the mailing list for future solicitations.
- ☐ Please remove our company from the mailing list.
- ☐ Please remove our company from this commodity or service only.

OFFER (FORM)

TO THE CITY OF FLAGSTAFF:

The undersigned hereby offers and agrees to furnish materials and/or services in compliance with the Solicitation, including Addenda, and as described in this offer made to the City.

Representative or Contact Person's Name: _____

Telephone: _____

Fax: _____

Offeror (Vendor): _____

Address: _____

City, State, Zip: _____

Signature of Person Authorized to Sign Offer

Title

Printed Name

Date

Attach: Addenda signed by vendor (if addenda were issued).

VENDOR QUESTIONNAIRE (FORM)

Vendor:

Company Name: _____

Doing Business As (if different than above): _____

Address: _____

City: _____ State: _____ Zip: _____ - _____

Phone: _____ Fax: _____

E-Mail Address: _____ Website: _____

Taxpayer Identification Number: _____

Mailing Address (if different than above):

Address: _____

City: _____ State: _____ Zip: _____ - _____

Vendor Contact for Questions about Offer:

Name: _____ Fax: _____

Phone: _____ E-Mail Address: _____

Transaction Privilege (Sales)Tax/Use Tax Information (check one):

_____ Vendor is located outside Arizona (The City will pay use tax directly to the AZ Dept of Revenue)

OR

_____ Vendor is located in Arizona (The vendor must invoice the applicable state and local tax to City, and remit taxes.)

Arizona Department of Revenue TPT License Number: _____
(Attach proof of registration)

Business License Information (check one):

_____ Vendor does not have a business location within the City of Flagstaff

OR

_____ Vendor has a business location (uses a building) within the City of Flagstaff

Flagstaff Business License Number:_____

Other Licenses (list any existing licenses you have required for work, e.g. Arizona Registrar of Contractor licenses, and attach copies):

Insurance (who will provide required coverages):

Insurance Company Name_____.

Contact & Phone Number_____

Subcontractors:

List any subcontractors to be utilized, if any.

REFERENCES (FORM)

REFERENCES. Please submit at least three (3) and no more than five (5) references for projects your company has performed in the last five (5) years demonstrating your experience with providing the services comparable to the Solicitation. The project description should include sufficient detail for the City to evaluate your experience. You should also include the name, title, and telephone number of both the current project owner and the project owner at time of work.

Firm/Government Agency Name:	
Contact Person:	Phone:
Title:	Fax:
Address:	E-Mail Address:
	Reason for Selecting as Reference:
Project Date, Size, Complexity, Scope and Duration:	

Firm/Government Agency Name:	
Contact Person:	Phone:
Title:	Fax:
Address:	E-Mail Address:
	Reason for Selecting as Reference:
Project Date, Size, Complexity, Scope and Duration:	

Firm/Government Agency Name:	
Contact Person:	Phone:
Title:	Fax:
Address:	E-Mail Address:
	Reason for Selecting as Reference:
Project Date, Size, Complexity, Scope and Duration:	

CITY OF FLAGSTAFF PURCHASING DIVISION
211 WEST ASPEN AVE.
FLAGSTAFF, ARIZONA 86001

Solicitation No. 2015-69
BUYER: Candace Schroeder, CPPB
PH: (928) 213-2278 FX: (928) 213-2209

Firm/Government Agency Name:	
Contact Person:	Phone:
Title:	Fax:
Address:	E-Mail Address:
	Reason for Selecting as Reference:
Project Date, Size, Complexity, Scope and Duration:	

Firm/Government Agency Name:	
Contact Person:	Phone:
Title:	Fax:
Address:	E-Mail Address:
	Reason for Selecting as Reference:
Project Date, Size, Complexity, Scope and Duration:	

EXCEPTIONS (FORM)

Notations. Any strikeouts, notes or modifications to the Solicitation documents shall be initialed in ink by the authorized person who signs the offer. If notations are made, they must be submitted with your offer and are considered Exceptions.

Exceptions: In addition to any notations on the Solicitation documents, please identify and list any exceptions to the Solicitation, by section/paragraph, on this Exceptions Form. The City reserves the right to reject, accept or further negotiate Exceptions. Exceptions may render the offer non-responsive.

Exceptions to Form of Contract: You may request changes to the form of contract (including any Standard or Special Terms and Conditions) on the Exceptions Form. You may also submit your own form of contract. The City will consider these in the same manner as any other exceptions.

You must indicate any and all exceptions taken to the requirements, specifications, and/or terms and conditions of this Solicitation, including the contract.

Exceptions (INITIAL ONE):

_____ No exceptions

_____ Exceptions taken (describe). Attach additional pages if needed.

CONFIDENTIAL MATERIALS (FORM)

If you believe part of your offer is confidential, mark the page(s) "CONFIDENTIAL" and isolate the pages as an attachment to this form. Also include an explanation why they are confidential.

Requests to deem the entire offer as confidential will not be considered.

If you want confidential information returned to you after contract award (and you are not selected for contract award), then note this below. You will be responsible for pick up.

Generally, information submitted in response to a Solicitation is subject to disclosure pursuant to the Arizona Public Records Law after contract award.

The information identified as confidential shall not be disclosed until the City makes a written determination whether the information may be treated as confidential. If the City determines it is necessary to disclose the information, the City will inform you in writing.

Confidential/Proprietary Materials (INITIAL ONE):

_____ No confidential/proprietary materials have been included with this offer

_____ Confidential/Proprietary materials are included in this offer. See attached.

COOPERATIVE PURCHASES (FORM)

The City of Flagstaff is a member of Flagstaff Alliance for the Second Century, along with the Coconino County Community College District, Northern Arizona University, Coconino County and Flagstaff Unified School District.

The City is also a member of S.A.V.E. (Strategic Alliance for Volume Expenditures), which consists of numerous municipalities, counties, universities, colleges, schools and other Arizona State agencies.

Cooperative purchasing arrangements such as the above are sanctioned by state law and allow a vendor to sell services and materials to any member of a cooperative group under the same pricing, terms and conditions of contract awarded to the vendor by any other member, following a competitive procurement process.

Is your company willing to offer the goods and services solicited under the terms and conditions of this solicitation to other members of the Flagstaff Alliance for the Second Century and S.A.V.E. under the same pricing, terms and conditions?

_____ Yes _____ No (INITIAL ONE)

If you answered No, that is acceptable. The City will not reject your offer or consider it to be non-responsive.

If you answered Yes, and a contract is approved, others may seek to do business with you under the same terms and conditions, subject to your approval.

DISCLOSURE (FORM)

Any offer must include this completed form. For any item checked YES, you must provide an explanation, including dates, company name(s), enforcing authority, court, agency, etc. Answering YES to one or more questions does not necessarily mean that you will be disqualified from this Solicitation. **FAILURE TO PROVIDE TRUE AND COMPLETE INFORMATION MAY RESULT IN DISQUALIFICATION FROM THIS SOLICITATION.**

Has your company or any affiliate* in the past 5 years: (i) had a permit revoked or suspended, (ii) been required to pay a fine, judgment or settlement of more than \$100,000, (iii) been convicted of a criminal offense (including a plea of guilty or *nolo contendere*), or (iv) been found in contempt of court, as a result of or in connection with any of the following:

1. Any offense indicating a lack of business integrity or honesty, including fraud, bribery, embezzlement, false claims, false statements, falsification or destruction of records, forgery, obstruction of justice, receiving stolen property, theft, price fixing, proposal rigging, restraint of trade or other antitrust law violation?
YES_____ NO_____
2. Violation of the terms of any public contract? YES_____ NO_____
3. Failure to pay any uncontested debt to any government agency? YES_____ NO_____
4. Violation of any law or regulation pertaining to the protection of public health or the environment? YES_____ NO_____

*An "affiliate" of your company means any person, company or other entity that, either directly or indirectly (for example, through stock ownership by family members), controls, is controlled by, or is under common control with, your company.

Has your company or any affiliate of your company in the past 5 years been named as a party in any lawsuit related to performance of a contract (you do not need to list subcontractor lien claims which have been fully paid/satisfied)?

YES_____ NO_____

If yes, provide the case name and number, brief description, and disposition or current status.

Has your company or any affiliate of your company in the past 5 years been debarred, disqualified or suspended from submitting proposals on public contracts?

YES_____ NO_____

I hereby verify that the foregoing information, and any explanation attached are to the best of my knowledge, true and complete.

Signature

Title

Date

DECLARATION RELATED TO SOLVENCY (FORM)

Is your firm currently involved in an ongoing bankruptcy as a debtor, or in a reorganization, liquidation, or dissolution proceeding, or has a trustee or receiver been appointed over all or a substantial portion of the property of your firm under federal bankruptcy law or any state insolvency law?

_____ Yes _____ No (INITIAL ONE)

DECLARATION RELATED TO GRATUITIES (FORM)

I hereby verify and declare that, to the best of my knowledge, neither the vendor nor anyone associated with the vendor has given, offered to give, or intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the offer ("Gratuities").

Signature of Person Authorized to Sign Offer

Title

DECLARATION OF NON-COLLUSION (FORM)

I hereby verify and declare that:

The pricing for this offer has been arrived at independently and without consultation, communication or agreement with any other vendor who may submit an offer.

The pricing for this offer has not been disclosed to any other vendor who may submit an offer, and will not be, prior to the Closing Date and Time.

No attempt has been made or will be made to induce any firm or person to refrain from submitting an offer, or to submit an offer with higher pricing than this offer, or to submit an intentionally high or noncompetitive offer or other form of complementary offer.

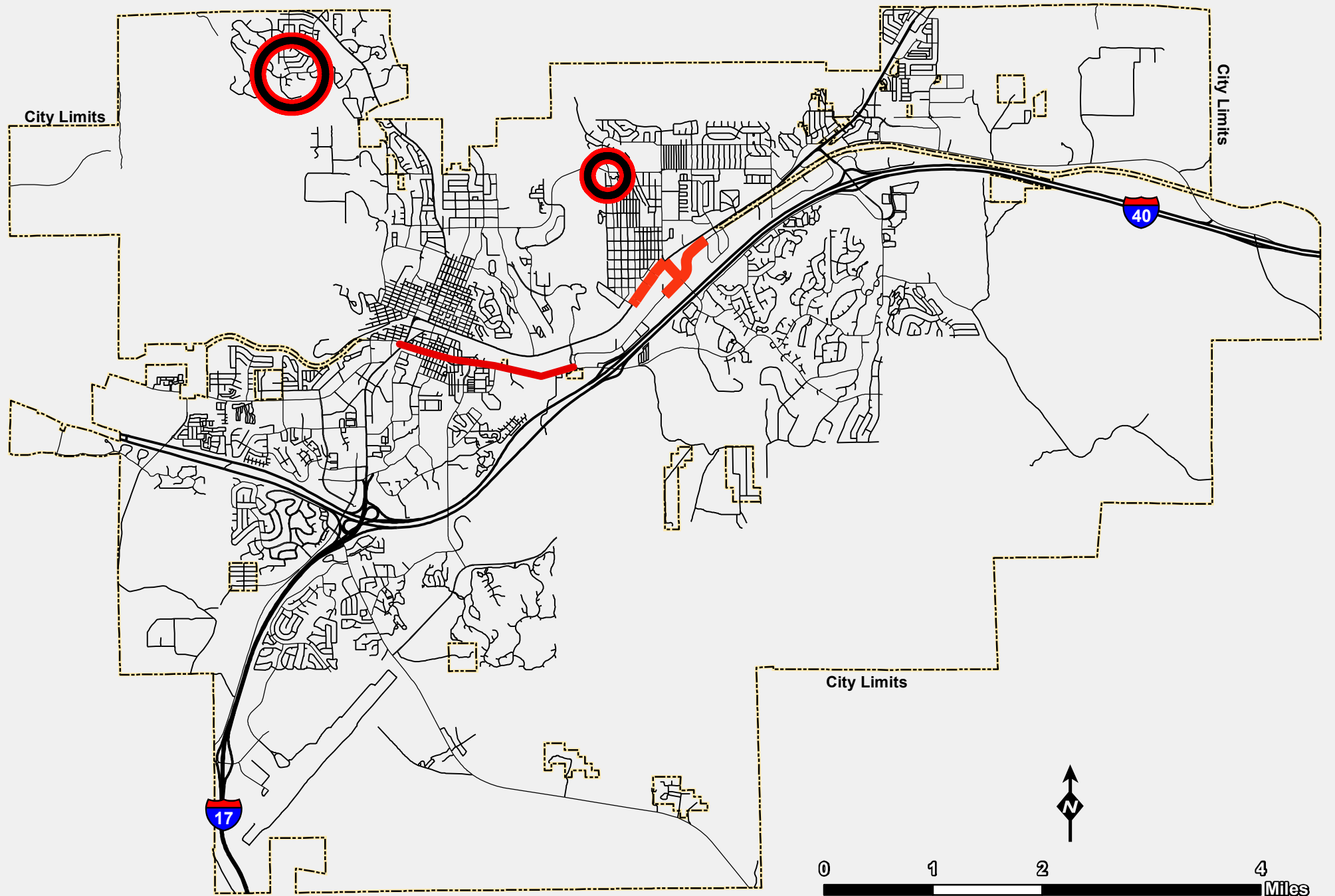
This offer is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive bid.

Offeror, its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by state or federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract.

Signature of Person Authorized to Sign Offer

Title

SLEDS Test Areas Map





TEAM FLAGSTAFF



SLEDS Project Update

- Introductions
- Background / History
- Completed Tasks
- In Progress
- Next Steps
- Questions / Discussion





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Background / History

- Existing Low Pressure Sodium System
 - Infrastructure Failures
 - Availability of Fixtures and Lamps
- Limited Field Testing – 89 North – Fall 2012
- Dark Skies Conference – ‘Blinded by the Light’ – August 2014
- SLEDs
 - IGA with ADOT, June 2015
 - FMPO – Surface Transportation Program
 - FY 16 - \$100K - Consultant Contract – October 2015
 - FY 16 - \$200K – Test Fixtures – June 2017
 - FY 17 - \$41k – Consultant Contract Change Order – May 2017
 - Additional 18 months, to March 2018
 - FY 18 - \$256K – First phase replacements – Date TBD





Highlights of RFP – Challenges and Opportunities

“We seek to identify how the City can affect a solution to this challenge. At the same time, we identify it as an opportunity for Flagstaff to demonstrate to other municipalities an innovative lighting solution for dark-sky preservation with LED technology. This entails:

- A cost effective solution to long-term street lighting needs that achieves municipal objectives for safety and cost effectiveness and astronomical objectives for maintaining dark skies.
- Innovation that advances the industry or best practices for technology transfer that advances the purpose of preserving dark skies.”





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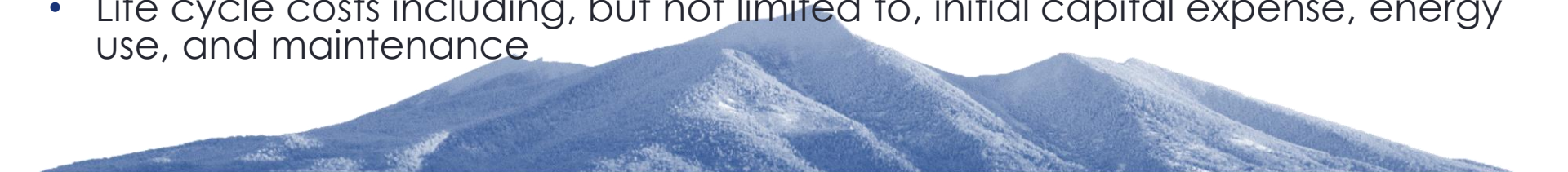


Highlights of RFP – SLEDs Project Direction

- Maintain or approximate current lighting levels
- Do not adversely impact the City's dark sky natural resource or the missions of the Lowell Observatory and the U.S. Naval Observatory
- Utilize existing light pole infrastructure

SLEDs Measures of Effectiveness may include:

- Light Uniformity
- Brightness and Spectrum Analysis from several perspectives
- Color rendition
- Wind loading (Effective Projected Area)
- Public commentary on lighting levels and color rendition
- Life cycle costs including, but not limited to, initial capital expense, energy use, and maintenance





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Completed Tasks

- Assessment of viability of LPS
- Structural Analysis of Mast Arms
- Existing Condition Measurements
 - Cheshire Residential Test Area
 - Arterial and Major Collector Test Sections
- Selected Test Fixture Types
 - Arterials and select Major Collectors
 - Select Major Collectors, Minor Collectors and Locals





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Test Fixtures – NBA LED

- Narrow Band Amber LED Fixtures
 - 100% Narrow Band Amber @ 595 nm
 - 1,500, 2,500 and 12,000 initial lumens
 - Pros:
 - Tighter spectral bandwidth than HLED option
 - Better than existing LPS/HPS system for reducing sky glow
 - Cons:
 - No color rendition
 - Higher power consumption than HLED or LPS





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Test Fixture - HLED

- Hybrid LED Fixture
 - 80% Narrow Band Amber
 - 20% Warm White (2700K)
 - 9,000 initial lumens
 - Pros:
 - Better than existing LPS/HPS system for reducing sky glow
 - Higher energy efficiency than NBALED
 - Color Rendition
 - Cons:
 - Not as good as an all NBALED system for sky glow
 - Wider spectral bandwidth than NBALED option





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Test Fixtures

- Select Major Collectors, Minor Collectors and Local Streets
 - Replacement for Low Pressure Sodium (3,220 – 14,500 lumens)
and High Pressure Sodium (4,400 – 13,400 lumens)
 - Narrow Band Amber LED
 - 1500, 2500 initial lumens @ 595 nm
 - On existing poles
 - Cheshire Neighborhood
 - 42 total fixtures in the southern half of neighborhood





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Test Fixtures

- Arterial and select Major Collectors
 - Replacement for Low Pressure Sodium (14,500 lumens) and High Pressure Sodium (13,400 and 23,000 lumens)
 - Narrow Band Amber LED
 - 12,000 initial lumens @ 595 nm
 - On existing poles
 - Butler Avenue – Milton to Sawmill
 - Fourth Street – Route 66 to Industrial





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Test Fixtures

- Arterial and select Major Collectors
 - Replacement for Low Pressure Sodium (14,500 lumens) and High Pressure Sodium (13,400 and 23,000 lumens)
 - Hybrid LED – 80% NBALED, 20% 2700K Warm White (dimmable)
 - 9,000 total initial lumens
 - On existing poles
 - Butler Avenue –Sawmill to Ponderosa Parkway
 - Route 66 – Arrowhead to Fourth
 - Cedar at West signalized intersection

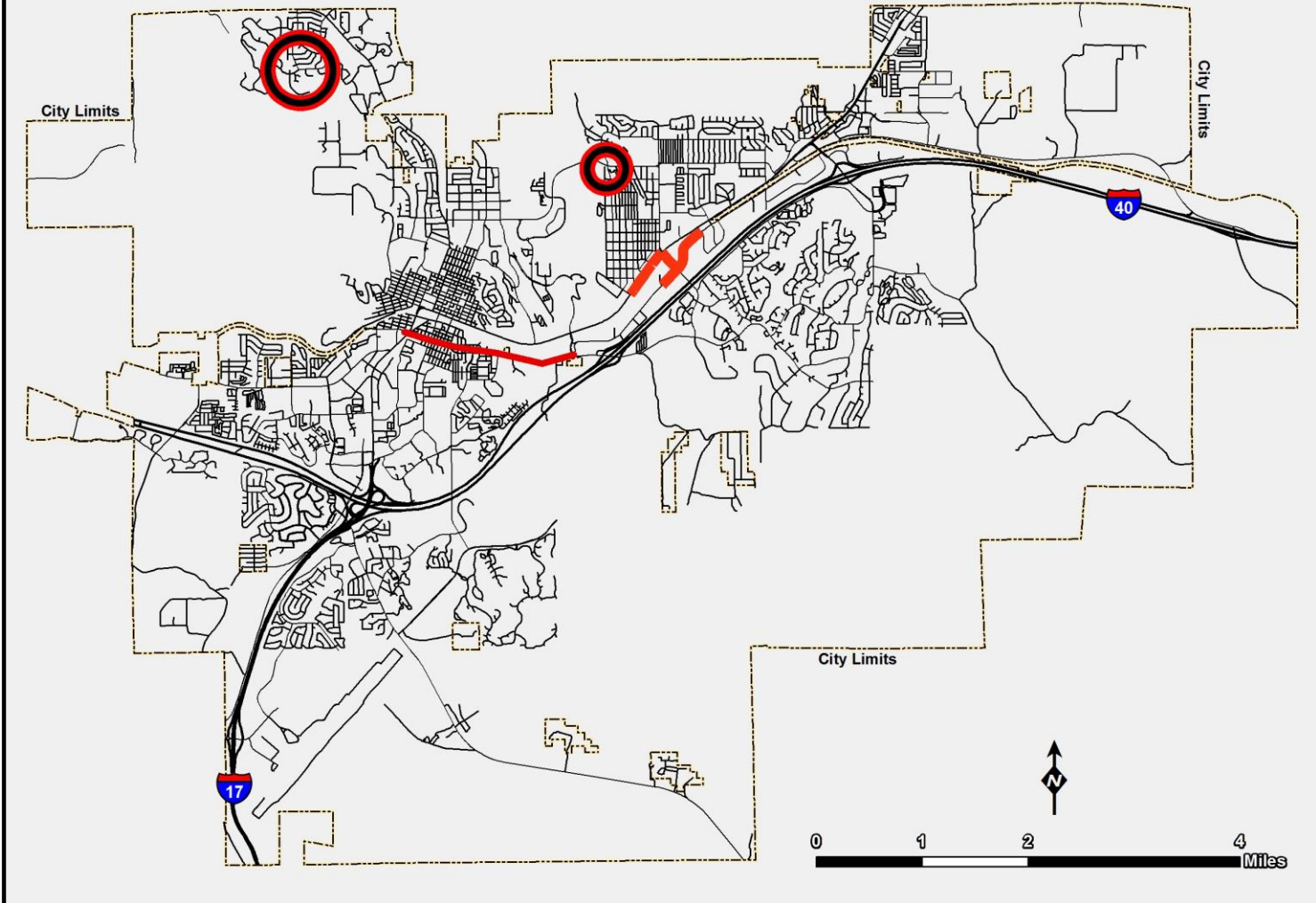




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SLEDS Test Areas Map





- ADOT procurement of Test Fixtures
- Draft SLEDs Report





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Next Steps

- Finalize procurement with ADOT – May 17'
- Installation of Test Fixtures – July 17'
- Measurement of Test Fixtures – S/F 17'
- Public feedback on Test Fixtures – S/F 17'
- SLEDS Team feedback on testing – S/F 17'





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Final Steps after Testing

- Develop recommended standards - Fall 17'
- Establish Citywide replacement scenarios – Winter 17'/18'
- Finalize SLEDs Project Report - Winter 17'/18'
- Consideration and Possible City Council Adoption of new Engineering Standards for Roadway Lighting - Spring 2018
- Monitor the evolving technology of LED roadway lighting
- Continue “Spreading the Word” of Flagstaff’s innovative and World Leading position in Roadway Lighting for Dark Skies preservation





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Questions?



CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To: The Honorable Mayor and Council
From: Gary Miller, Development Engineer
Co-Submitter: Rick Barrett
Date: 04/19/2017
Meeting Date: 05/09/2017



TITLE

Discussion and Direction: An ordinance adopting revisions to Title 13 of Flagstaff City Code entitled "Engineering Design and Construction Standards and Specifications for New Infrastructure."

RECOMMENDED ACTION:

Staff will provide an overview of the proposed revisions and ask Council to provide initial feedback on the proposed revisions, concerns with any revisions, and any sections the Council would like to review and discuss in more detail.

EXECUTIVE SUMMARY:

The intent of these Engineering Standards and Specification is to provide information on minimum acceptable design and construction practices for new infrastructure in the City of Flagstaff. The last update to these standards was made in 2012. Since then, through regular use and enforcement of the standards, Engineering staff has identified some necessary revisions. These revisions have been proposed to correct errors and omissions, incorporate best practices, incorporate new technologies, improve the look and consistency of the standards, and provide consistency with other adopted codes and standards.

Proposed Schedule for Discussion and Adoption (Rescheduled Dates):

~~04/11 Work Session: Council will provide initial comments to staff regarding proposed revisions~~
 05/09 Work Session: Discuss Chapters 1-9
 05/16 Council Meeting: Discuss revisions to section concerning Traffic Impact Analysis (TIA)
 06/06 Council Meeting: Discuss Chapters 10-23
 06/20 Council Meeting: Finalize any discussions and read Ordinance for the first time
 07/05 Council Meeting: Read Ordinance by title only for the final time/adopt Ordinance

INFORMATION:

Background/History:

The City of Flagstaff previously adopted Title 13 of City Code entitled "Engineering Design and Construction Standards and Specification for New Infrastructure" (later referred to as Engineering Standards) in Ordinance 2012-05.

The proposed and ongoing revisions to the Engineering Standards ensures that the City continues to address and improve public safety. These Standards also ensure high performing infrastructure that will improve and reduce maintenance in the future.

The Engineering Standards and proposed revisions are the result of a comprehensive review from an internal stakeholder committee, which were then presented to the professional community (the Chamber of Commerce, Northern Arizona Builders Association, local civil engineers, contractors, architects, Traffic Commission, and Planning and Zoning Commission). Comments were solicited at these meetings and through the City's online community forum and subsequently incorporated into the proposed revisions when appropriate.

The proposed revisions have been available on the City's website for the last eight months and updated as additional revisions have been made. The updated revisions to the City's Engineering Standards can be found at <http://www.flagstaff.az.gov/DocumentCenter/View/50249>.

Upon approval of the proposed revisions, Engineering will begin another revision cycle. Staff will include the same stakeholders, and involve key community partners, as we work through this revision cycle. Staff will bring these proposed revisions to Council in approximately one to two years.

Key Considerations:

Below is a list of the major revisions made to the Engineering Standards

- Survey Standards
- TIA Standards
- Changes as a result of the International Fire Code
- Permanent Stabilization

See the attached revisions summary for brief description of all of the revisions made. This attachment also provides a schedule for discussion of these revisions.

Community Benefits and Considerations:

The community benefits economically by having public infrastructure that is designed and constructed to serve the public in the most efficient way possible, and that will have a minimal cost of operation and maintenance. The community also benefits from improved public safety as a result of the adoption of the proposed revisions to the Engineering Standards.

Options and Alternatives:

1. The Council may choose to accept or reject any or all of the proposed amendments.
2. The Council could choose to make different amendments.
3. The Council can postpone adoption of the Standards as a public record in order to gather more information or public input.

Attachments: Summary of Revisions

2016 Engineering Standards Revision Summary

Discussion items have been scheduled in accordance with this color coding:

May 2nd
May 9th
May 16th

N/A

\$ =

\$\$ =

\$\$\$ =

No additional cost/impact

Minor change in cost/impact

Moderat change in cost/impact

Significant change in cost/impact

Cost/Impact

Businesses &
Residents

Ongoing
Maintenance

Chapter/
Section

Title

Summary of Revision

Why?

Developers

Major Revisions

13-02, 13-03 & 13-11	Mapping and Surveying	<p>The existing Mapping chapter (13-02) defines the type of maps required, and what should be included in those Maps, for different types of Plat applications.</p> <p>The existing Survey chapter (13-11) only consisted of requirements for survey monumentation. This section has been revised and moved to chapter 13-03 and incorporated into the added Survey requirements.</p> <p>With the help of the Northern Arizona APLS organization these two chapters have been revised and expanded to include requirements for Boundary, Topographic, Construction and As-Built Survey; develop standards to allow and incorporate new technologies as it relates to surveying; provide consistency with State requirements; and provide standards for better protection and maintenance of existing survey monuments.</p> <p>These revisions have some other impacts in additional chapters as identified below.</p>	<p>Provide consistency with state requirements.</p> <p>Provide standards for new technologies that were not previously used.</p> <p>Additional requirements to help bridge the gap of professional expertise on City staff. (City does not have a Registered Land Surveyor on staff)</p>	\$	N/A	\$
13-05-002-0003	Traffic Impact Analysis	<p>Traffic Impact Analysis Section, of the Engineering Standards has been modified to include a reference to a more detailed procedure of the requirements for a Traffic Impact Analysis. This modified document is now referred to as the City of Flagstaff Transportation Impact Manual. This document includes; how to calculate project trips and possible reductions, the process of determining which category of TIA needs to be completed, how to determine existing conditions, how to determine needed improvements, a sample outline structure, and what is required as appendices. This document has greatly grown in length due to the added detail of the procedures.</p>	<p>Provides better documentation and clarifies use for current policy.</p>	N/A	N/A	N/A

2016 Engineering Standards Revision Summary

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Chapter/ Section	Title	Summary of Revision	Why?	Developers	Cost/Impact Businesses & Residents	Ongoing Maintenance
13-13	Fire Safety Requirements	<p>Several substantive changes have been made as a result of the recent adoption of the 2012 International Fire Code (IFC). These substantive changes include the following:</p> <ul style="list-style-type: none"> -Increased Diameter of Urban and Rural Cul-De-Sacs -Elimination of Local Narrow Street section due to increased width of Fire Access Routes -Widening of Residential Local Street section due to increased width of Fire Access Routes -Adjusted travel lane widths for thoroughfare street sections due to increased width of Fire Access Routes <p>In addition to these substantive changes large portions of the Fire Safety Requirements were replaced with references to the appropriate section within the IFC to eliminate duplication and potential future conflicts. Other portions of the Fire Safety requirements were moved to more appropriate sections of the Engineering Standards, and a reference added. As an example, the preferred model of Fire Hydrants is now located in Fire Hydrants section of the Utilities chapter (13-09).</p>	Future Discussion			
13-17	Erosion Control	<p>Major portions of this chapter were removed with our last revision of the Engineering Standards in 2012 with anticipation that these requirements would be included in the upcoming revision of the City's Stormwater Design Manual. Unfortunately this revision never came forward. Permanent Erosion Control has continued to be a requirement, but often times it is not effectively applied during construction. The result has been inadequate or failing erosion control measures post construction.</p> <p>These revisions include localized standards for seed mixtures, seeding requirements, and seeding establishment to accommodate our local conditions.</p>	Future Discussion			

All Revisions

13-01	Administrative Enactments, Agency Controls and Reviews, and Work in Public Rights-Of-Way	Corrected typo errors	Typos			
		Added reference as a result of Survey revisions mentioned above	Survey			
13-02	Mapping	Revisions made as a result of the Survey revisions mentioned above.	Survey			
13-03	Survey	New/Moved chapter as a result of the Survey revisions mentioned above.	Survey			
13-04	Easements and Rights-Of-Way	Added references and additional detail for corner cut-off requirements as a result of the Survey revisions mentioned above.	Better Reference			

2016 Engineering Standards Revision Summary

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May 16th

N/A
\$ =
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Significant change in cost/impact

Chapter/ Section	Title	Summary of Revision	Why?	Developers	Cost/Impact Businesses & Residents	Ongoing Maintenance
13-05	Engineering Design Reports	A few typos and grammatical errors corrected throughout the chapter.	Typos			
		Traffic Impact Analysis revisions as mentioned above	Future Discussion			
13-06	Construction Plans	A few typos and grammatical errors corrected throughout the chapter.	Typos			
		Added references and additional detail for Survey revisions mentioned above.	Survey			
		13-06-002-0001.1.1.A.3 - Add "Cost shall not be used as a justification" to modifications request criteria.	Codify current policy	N/A	N/A	N/A
		13-06-002-0001.1.2 - The process outlined in paragraph A above shall be utilized in a case where a project manager seeks to implement a promising new technology that is likely to improve the longevity and resilience of project infrastructure. Additional requirements and conditions may be imposed by the City Engineer on a case by case basis.	Provide a process for incorporating new technologies	N/A	N/A	TBD
		13-06-002-0001.1.2 - Added language to better define the appeal process for an Engineering Standards Modification request. This language was developed with the assistance of the City Attorney in early 2016 when Engineering was faced with their first appeal.	Codify current policy	N/A	N/A	N/A
		13-06-007-0003 - Added references to the section of the Engineering Standards that specifies Pavement Marking requirements	Provide additional clarification for ease of use.	N/A	N/A	N/A
13-07	Grading	No revisions made.				
13-08	Stormwater Management	No revisions made.				
13-09	Water, Sewer, and Other Underground Utilities	A couple of references to other standards have been corrected.				
		Several fire hydrant standards, fire flow design criteria and fire line standards have been moved to this Chapter as a result of Fire Safety Requirements revisions mentioned above.	Provides for better ease of use of the standards.	N/A	N/A	N/A
		13-09-003-0005.B.6 - Change the language from "one (1) valve" to "two (2) valves" minimum are required on all 3-way tee fittings.	Reduced down-time for maintenance (current policy).	\$	N/A	-\$
		13-09-003-0007.G - Add this additional paragraph: "When an existing water stub is required to be abandoned, it shall be abandoned at the main, the valve removed and a blind flange installed on the tee."	Prevent future maintenance issues of leakage.	\$	N/A	-\$
		13-09-003-0010 - Add language to account for new 1" Air Release Valve detail 9-03-101.	Reduced cost and space requirements for small lines.	-\$	-\$	\$
		13-09-006-0001.A.2 - Define ductile iron class for sewer as 150 except in special design situations.	Previous requirements were oversized.	-\$	N/A	N/A
		13-09-006-0001.B.2 - Change the language to clarify the class of ductile iron pipe for water: "Class 350 for ductile iron pipe 4 inch to 10 inch in diameter. Class 250 for ductile iron pipe 12 inch diameter and larger".	Previous requirements were oversized for larger pipe.	-\$	-\$	N/A
		13-09-006-0001.B.4 - Add: Gate valves with AWWA C515 250 PSI rating Add: Butterfly valves with AWWA C504 250 PSI rating	Clarified rating of valves to conform to pipe ratings	N/A	N/A	N/A

2016 Engineering Standards Revision Summary

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May 2nd
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\$ =
\$\$ =
\$\$\$ =

No additional cost/impact
Minor change in cost/impact
Moderat change in cost/impact
Significant change in cost/impact

Chapter/ Section	Title	Summary of Revision	Why?	Developers	Cost/Impact Businesses & Residents	Ongoing Maintenance
		<u>13-09-006-0001.B.5</u> - Delete the section that references the flyash cement grout and add: "sealed with end seals by Advanced Products and Systems, or approved equal."	Improved technology for pipe casings	\$	N/A	-\$
		<u>13-09-006-006.3.A.7</u> - Fire hydrants shall be installed within 300 feet of all parts of a commercial building. Hydrants shall also be placed within 100 feet of Fire Department connections to sprinkler and standpipe systems.	Brings standard into conformance with IFC.	N/A	N/A	N/A
		<u>13-09-006-0006.3.A.8</u> - Offsite spacing shall be 300 feet between hydrants for commercial areas and 500 feet spacing for one and two-family subdivisions.	Brings standard into conformance with IFC.	N/A	N/A	N/A
		<u>13-09-006-0006.4</u> - The second paragraph was moved as part of the Fire Safety Requirements mentioned above. The last sentence of this paragraph was added. Per ADEQ requirements, fire lines may not exceed 100' in length from the water main to the backflow assembly inside the fire riser room.	Brings standard into conformance with ADEQ & IFC.	\$	N/A	N/A
13-10	Streets	<u>13-10-004-0001.B</u> - Temporary cul-de-sac revision per Fire Safety Requirements revision mentioned above.	Future Discussion			
		<u>13-10-006-0002</u> - Removal of detailed standards on clear view zones to eliminate any conflict with AASHTO Guidelines.				
		<u>13-10-008-0002.E</u> - Revised per Survey revisions mentioned above.				
		<u>13-10-009-0001.A</u> - Revised pavement design life span from 27 years to 20 years to be consistent with the manual for "Asphalt Concrete Pavement Design for the City of Flagstaff".				
		<u>13-10-009-0001.B.5</u> - Add to the pavement structural section requirements: "A chip seal is required for all new public pavement improvements including streets, turn lanes, pavement matchups, trench repairs, and all other cases where a new asphalt surface course is constructed. The fee shall be payable to the City of Flagstaff and shall be calculated as defined in City Code Title 3, Section 10-001-0002. The fee shall be paid at the time of the applicable construction permit." Delete the sentence from the paving notes that reads: A chip seal is required on all public paving projects.				
		<u>13-10-010-0001.E</u> - Correction to restrict backing maneuvers on all collector streets.				
		<u>13-10-010-0002</u> - Added references for turn lane configuration standards.				
		<u>Table 10-10-01</u> - Removed street section and widened a street section as a result of the Fire Safety Requirements revisions mentioned above.				
		<u>Table 10-10-01 and Notes</u> - Revised minimum curve radiuses to be consistent with AASHTO.				
		<u>Table 10-10-02</u> - A couple of minor changes to address typos and grammar errors.				
		<u>Table 13-10-12-01</u> - Revised table to comply with Fire Safety Requirements revisions as mentioned above.				
		<u>Table 13-10-12-01 Notes</u> - Note 1 revised to define where on street parking is measured from to be consistent with the other street section details.				

2016 Engineering Standards Revision Summary

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May 2nd
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May 16th

N/A
\$ =
\$\$ =
\$\$\$ =

No additional cost/impact
Minor change in cost/impact
Moderat change in cost/impact
Significant change in cost/impact

Chapter/ Section	Title	Summary of Revision	Why?	Developers	Cost/Impact Businesses & Residents	Ongoing Maintenance
		<u>13-10-014-0001.1</u> - This revision rearranges the order of the different roadway classifications from higher demand to lower demand roadways. Additionally, several references throughout this chapter have been revised to refer to this section rather than the Regional Plan.				
		<u>13-10-014-0003 Map</u> - This section has been added as a result of the adoption of Ordinance 2015-12.				
13-11	Survey	This chapter has been moved as identified in the Survey revisions mentioned above.				
13-12	Street Lighting	Table 12-03-001 - Correction of streetlight spacing for local streets, and elimination of redundancy. Revised note for clarification. <u>13-12-003-0004.A.3</u> - Revision for clarification. Table 12-05-01 - Correction to adjust for experienced failures. <u>13-12-005-0002</u> - Revisions to correct typos and grammar.				
13-13	Fire Safety Requirements	The formatting of this chapter has been revised to be consistent with the rest of the standards. Several sections of been removed and replaced with references to the International Fire Code and other sections within the Engineering Standards as identified in the Fire Safety Requirements revisions mentioned above.				
13-14	Bicycle Facilities	No revisions made.				
13-15	Work in Public Rights-of-Way and Easements	<u>13-15-001-0001.G</u> - Removed reference to small projects as this section applies to all permits within the Right-of-Way. <u>13-15-001-0001.G</u> - Removed reference to the Engineering Standards for Traffic Control Plan requirements as we now rely on the MUTCD for these requirements. <u>13-15-002-001.A</u> - Corrected reference				
13-16	Traffic Signals, Signing, and Pavement Markings	Corrected several typo errors throughout the chapter <u>13-16-002-0002</u> - This section was added as a result of an inadvertent omission from the 2012 adoption of the Engineering Standards. This section has been in or working copies from 2012, and is currently enforced. <u>13-16-005-0001</u> - Corrected reference to pedestrian push button signs, and corrected the reference to the COF detail for Street Signs. <u>13-16-005-0002</u> - Added reference for sign requirements for clarification. Added salvaging of removed signs for future sign maintenance. <u>13-16-006-0002</u> - Revised references to update with ADOT standards, and cleanup of references in general.				
13-17	Erosion Control	This chapter has major additions identified in the Erosion Control Revisions mentioned above.				

2016 Engineering Standards Revision Summary

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May 2nd
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May 16th

N/A
\$ =
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No additional cost/impact
Minor change in cost/impact
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Chapter/ Section	Title	Summary of Revision	Why?	Developers	Cost/Impact Businesses & Residents	Ongoing Maintenance
13-18	Landscaping Standards for Rights-of-Way	No revisions made.				
13-19	Irrigation Systems	No revisions made.				
13-20	Not Used					
13-21	Revisions to MAG Uniform Standards Specifications and MAG Uniform Standard Details	13-21-001-104.1.3 - Revised MAG section, which does not restrict potable water use for construction to be in alignment with City Code 7-03-001-0014, Water Conservation.				
		13-21-001-0330.3 - Revised chip seal dates to a shorter window during Summer months to achieve better temperatures for placement.				
		13-21-001-0336.2.1 - Revised to be more stringent than MAG to match current practices; and provides a more structurally sound matchup with more longevity.				
		13-21-001-0710.3.2.1 - Reconciles the standard with a 2013 policy decision; lowered the MAG criteria as asphalt plants were unable to meet dry tensile strength and Marshall stability minimums due to the softer oil appropriate for this climate.				
		13-21-002-0250 - MAG revised this specification to be more strict than this required, therefore the City's revision is being removed.				
		13-21-002-0380 - Correction of a previous transcription error, and additional clarification provided where "Design" was previously stated.				
		13-21-002-0422 - Corrected reference to City detail.				
13-23	Standard Drawings	All details have been redrawn in AutoCAD to improve the look and format of all detail drawings.				
		Detail 8-02-010 - Deleted detail due to redundancy with other trenching detail 9-01-030				
		Detail 9-03-031 - This detail was inadvertently omitted in the adoption of the 2012 standards, but is currently enforced.				
		Detail 9-03-080 - Revised meter box detail to a polymer meter box for constructability and maintenance considerations.				
		Detail 9-03-080A - This detail was added as we do not currently have a standard for a traffic rated meter box.				
		Detail 9-03-101 - This detail was added to accommodate 1" Air Release Valves which we currently don't have a standard for. These are cheaper to install, take up less real estate, and are more applicable to smaller diameter mains.				
		Detail 10-04-010 - Urban Cul-De-Sac diameter has been increased per Fire Safety Requirements revisions mentioned above. Parkways were eliminate to reduce the impact to developments. Pavement radius increase of 12.5 feet; R.O.W. radius increase of 11.5 feet.				

2016 Engineering Standards Revision Summary

Discussion items have been scheduled in accordance with this color coding:

May 2nd
May 9th
May 16th

N/A
\$ =
\$\$ =
\$\$\$ =

No additional cost/impact
Minor change in cost/impact
Moderat change in cost/impact
Significant change in cost/impact

Chapter/ Section	Title	Summary of Revision	Why?	Developers	Cost/Impact Businesses & Residents	Ongoing Maintenance
		<u>Detail 10-04-011</u> - Rural Cul-De-Sac diameter has been increased per Fire Safety Requirements revisions mentioned above. Pavement and R.O.W. radius increase of 4'.				
		<u>Detail 10-09-038</u> - Residential Local street section has been increased by 2 feet per Fire Safety Requirements revisions mentioned above.				
		<u>Detail 10-09-039</u> - Residential Local Narrow street section has been removed per Fire Safety Requirements revisions mentioned above.				
		<u>Detail 10-10-034</u> - Removed details related to 20' curb returns as MAG has created new sidewalk ramp details to utilize.				
		<u>Details 10-10-035; 10-10-036; 10-10-037</u> - Removed these details as MAG has created new sidewalk ramp detail to utilize.				
		<u>Detail 14-01-010</u> - Revised detail to increase concrete thickness from 4" to 6" to prevent deterioration of trails due to the maintenance traffic the trails typically see. Also decreased the spacing of Expansion Joints from 100' to 50' to decrease the amount of cracking in the concrete trail.				
		<u>Detail 14-01-012</u> - This detail is being removed as it was intended to be removed with the last revisions.				
		<u>Detail 16-04-010</u> - This detail has been added to provide details and standards for Circular Rapid Flashing Beacons. These types of pedestrian improvements are becoming more prevalent and are currently in use along 4th Street.				
		<u>Details 16-05-010 & 16-05-020</u> - These details have been moved from detail numbers 10-03-010 and 10-03-020. These details have also been revised to add references to other standards for compliance and clearer direction.				
		<u>Detail 16-06-010</u> - This detail has been moved from 10-06-010, and additional detail added for clarification. We have experienced difficulty in the past laying out intersection striping, and these changes should make that layout process more clear.				
		<u>Detail PW-50-10</u> - This detail has been revised to include a hinge detail for trash enclosures to allow doors to fully move out of the work area for refuse collection.				

CITY OF FLAGSTAFF

STAFF SUMMARY REPORT

To: The Honorable Mayor and Council
From: Shannon Anderson, Human Resources Director
Date: 04/14/2017
Meeting Date: 05/09/2017



TITLE

Discussion and Direction: Updating the name of the Commission on Disability Awareness.

RECOMMENDED ACTION:

City Council will discuss the name of the Commission on Disability Awareness including feedback from the Commission Chair and members.

EXECUTIVE SUMMARY:

The City Council will discuss the renaming of the Commission on Disability Awareness to emphasize ability and not disability. The discussion will also include the consideration of expanding the Commission's role to something more than creating awareness. The Commission is established by City Code, so code amendments may be needed to effectuate changes.

INFORMATION:

The Commission on Disability Awareness consists of seven citizens and serves the disabled community in Flagstaff. The Commission's goals are to expand education opportunities; improve access to housing, buildings and transportation; have greater participation in recreational, social and cultural activities; encourage greater opportunity for employment and expand and strengthen rehabilitative programs and facilities.

The current members are:

Monica Attridge
 Christina Leland
 Suzanne Motsinger
 Kevin Parkes
 Russell Randall
 Michael Sanderfer
 Kaitlyn Verfuether, Commission Chair

The term "disability" is a defined term used in the Americans with Disabilities Act ("ADA"), a federal law. However, the Commission on Disability Awareness is separate and apart from the ADA, and the City may define the name and scope of the Commission.

Attachments: City Code re DAC

CHAPTER 2-18 COMMISSION ON DISABILITY AWARENESS

SECTIONS:

2-18-001-0001 COMMISSION ESTABLISHED, DUTIES

2-18-001-0002 MEMBERS AND TERMS:

2-18-001-0003 ORGANIZATION:

2-18-001-0001 COMMISSION ESTABLISHED, DUTIES:

There is hereby established the Commission on Disability Awareness. It shall be the Commission's duty to advise the City Council on all issues affecting the City of Flagstaff in relation to individuals with disabilities and shall include, but not be limited to:

- A. Review of City compliance with the Americans with Disabilities Acts and the Arizonans with Disabilities Acts.
- B. Review of City programs, activities, services and procedures to ensure all citizens are afforded equitable access to same.
- C. Develop and transmit recommendations to the City Council to assist the City Council in developing policies to respond to the concerns and needs of those with disabilities.
- D. Provide a public forum for identifying and discussing issues of interest relating to individuals who are disabled, physically or mentally, and to act as an information and referral group to assist individuals, organizations, and employers in efforts to aid members of the community toward greater independence and community interactions.
- E. Increase community awareness of the real contributions made by citizens of the community who are disabled and to provide recognition for employers, employees, students, teachers, parents, and professionals who further the goals of disability awareness and inclusion. (Ord. 1780, 11/17/92)

(Ord. No. 1780, Enacted, 11/17/92)

2-18-001-0002 MEMBERS AND TERMS:

The Commission shall consist of seven (7) members who shall be appointed by the City Council based upon the recommendations of the Committee/Commission. The Commission and the City Council will make every effort to recruit and appoint those individuals most directly involved and concerned with the obligations of the Americans with Disabilities Act. Commission members shall serve staggered, three (3) year terms.

In the event a member's term expires, that member shall continue to serve until reappointed or replaced by the City Council. (Ord. 1780, Enacted, 11/17/1992; Ord. 1833, Amended, 05/03/1994; Ord. 2007-31, Amended 07/23/2007; Ord. 2014-28, Amended, 11/18/2014)

2-18-001-0003 ORGANIZATION:

A Chairperson and other Commission officers shall be selected by a majority vote of those members present at a meeting called for that purpose for a term of one (1) year. The Commission shall meet at such times, dates and locations as determined by the members except that the Chairperson may call a special meeting with not less than twenty-four (24) hours' notice. All other rules of procedure shall be established by the members so long as said rules are consistent with State law, the City Charter, the Board and Commission Members' Rules and Operations Manual, and the ordinance codified in this section.

A Commission member who is absent from three (3) consecutive regular meetings may have their remaining term terminated by a vote of the City Council upon recommendation of the Commission. (Ord. 1780, Enacted, 11/17/1992; Ord. 2007-37, Amended 07/24/2007; Ord. 2014-28, Amended, 11/18/2014)

The Flagstaff City Charter and City Code are current through Ordinance 2017-02, passed February 7, 2017.

Disclaimer: The City Clerk's Office has the official version of the Flagstaff City Code. Users should contact the City Clerk's Office for ordinances passed subsequent to the ordinance cited above.

CITY OF FLAGSTAFF STAFF SUMMARY REPORT

To: The Honorable Mayor and Council
From: David McIntire, Community Investment Director
Date: 04/25/2017
Meeting Date: 05/09/2017



TITLE

Discussion and Direction: Possible development incentive in the amount of \$2,500,000 to assist with the relocation of Soliere Avenue to support Vintage Partners, LLC's commercial development at I-40 and Country Club.

RECOMMENDED ACTION:

Provide direction to staff regarding a potential Development Incentive Agreement with Vintage Partners, LLC, including Council's interest in entering the agreement and, if so, guidance on what to seek in the agreement.

EXECUTIVE SUMMARY:

Council received a presentation on Vintage's request for a development tax incentive in September of 2016. The incentive would use a portion (less than 50%) of the transaction privilege tax (TPT) generated by the development to reimburse the developer for costs associated with the relocation and improvement of Soliere Avenue up to \$2,500,000. Staff, based on Council direction, ordered a third-party analysis of the potential incentive and has used that and other information to better understand the implications of the incentive. That analysis shows that the City can anticipate recapturing more tax revenue than the amount of the incentive within 15 years.

INFORMATION:

There has been City participation in economic development activities in a number of areas of town supporting a number of businesses and/or districts. This incentive agreement would make possible the development of a grocery store and other commercial activities in currently undevelopable land along Soliere Avenue which can provide services to the area south of I-40. The City's analysis (referenced above) acknowledges there will be cannibalization, but also shows that the City will gain more than \$2,500,000 in new tax revenue within the first 15 years regardless of the level of cannibalization.

Attachments: Vintage Powerpoint Presentation



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Retail Tax Development Incentive

Incentives are tools used to bring, create or accelerate economic growth in a community.

Can help bring jobs, prevent retail leakage, and enhance services and infrastructure.





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Public Supported Economic Development

Some local examples:

- Downtown Redevelopment Plan
- Southside
- Aspen Sawmill
- Nestle-Purina and other manufacturers





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Transaction Privilege Tax (TPT) incentives in Arizona

- Marana
- Goodyear





General Purpose

- Can overcome infrastructure issues preventing development.
- Can lead to, or accelerate, enhanced sales tax and property tax, provide jobs, prevent retail leakage, and provide services.





Considerations

- Can be seen as assisting new retail business to compete with already existing retail businesses.
- Can create a perception of favoring one business over another.
- Can take unused land and make it more productive earlier.





Vintage Partners

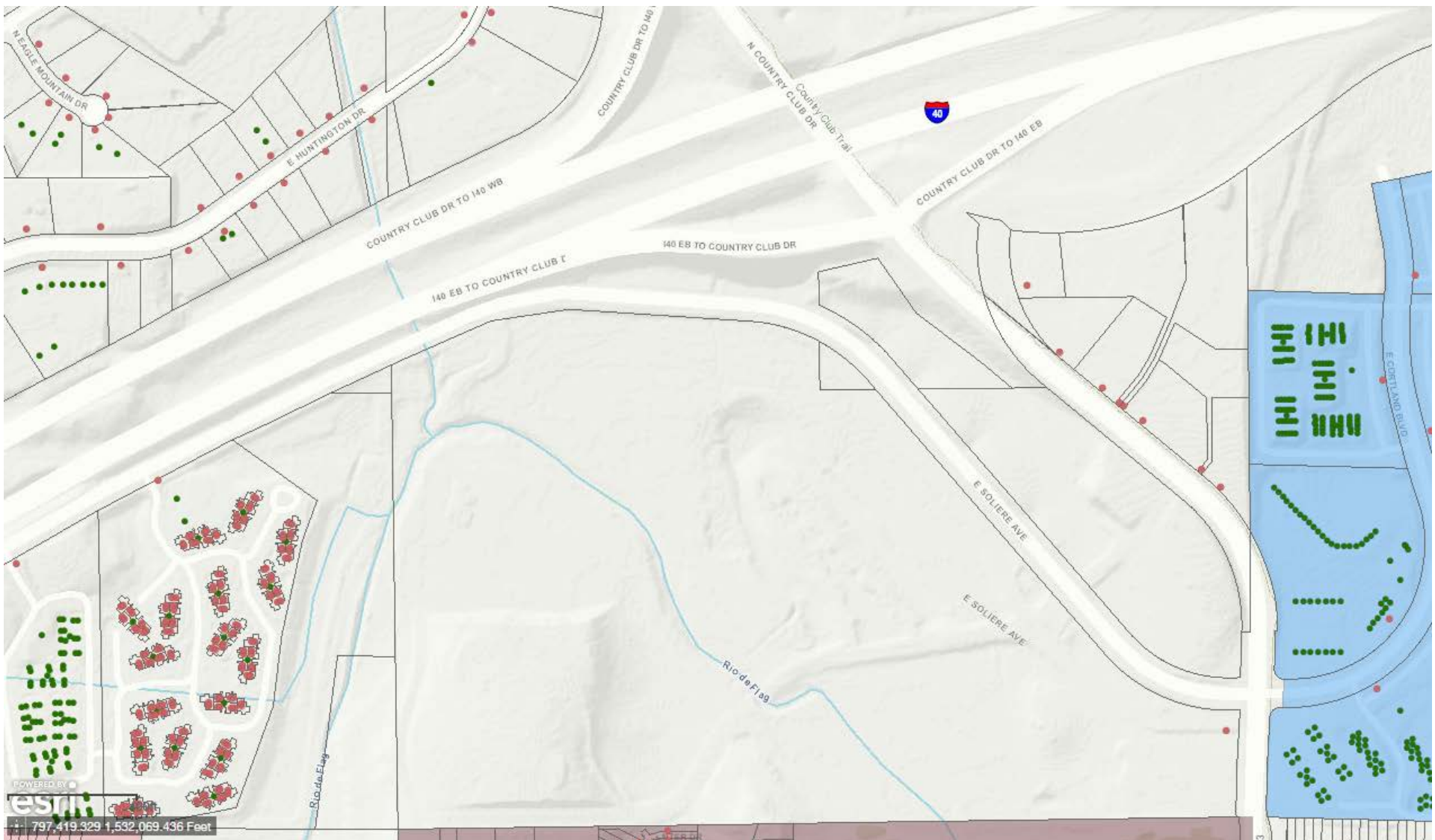
There is a development currently requesting the use of this incentive tool:

- Specific project located at I-40 and Country Club.
- Three part project.
- Incentive only for the commercial portion located along the northern side of Soliere Avenue.

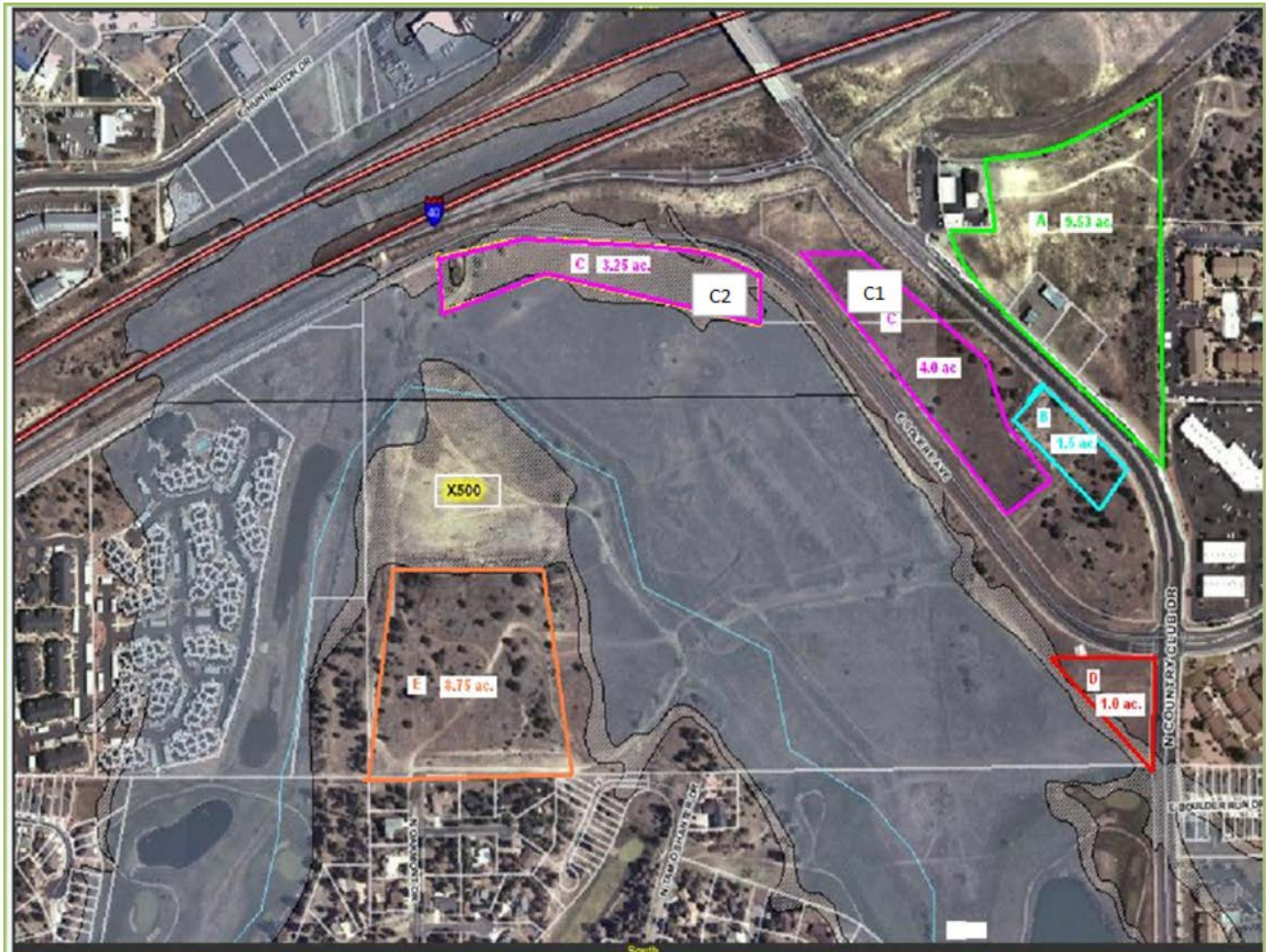




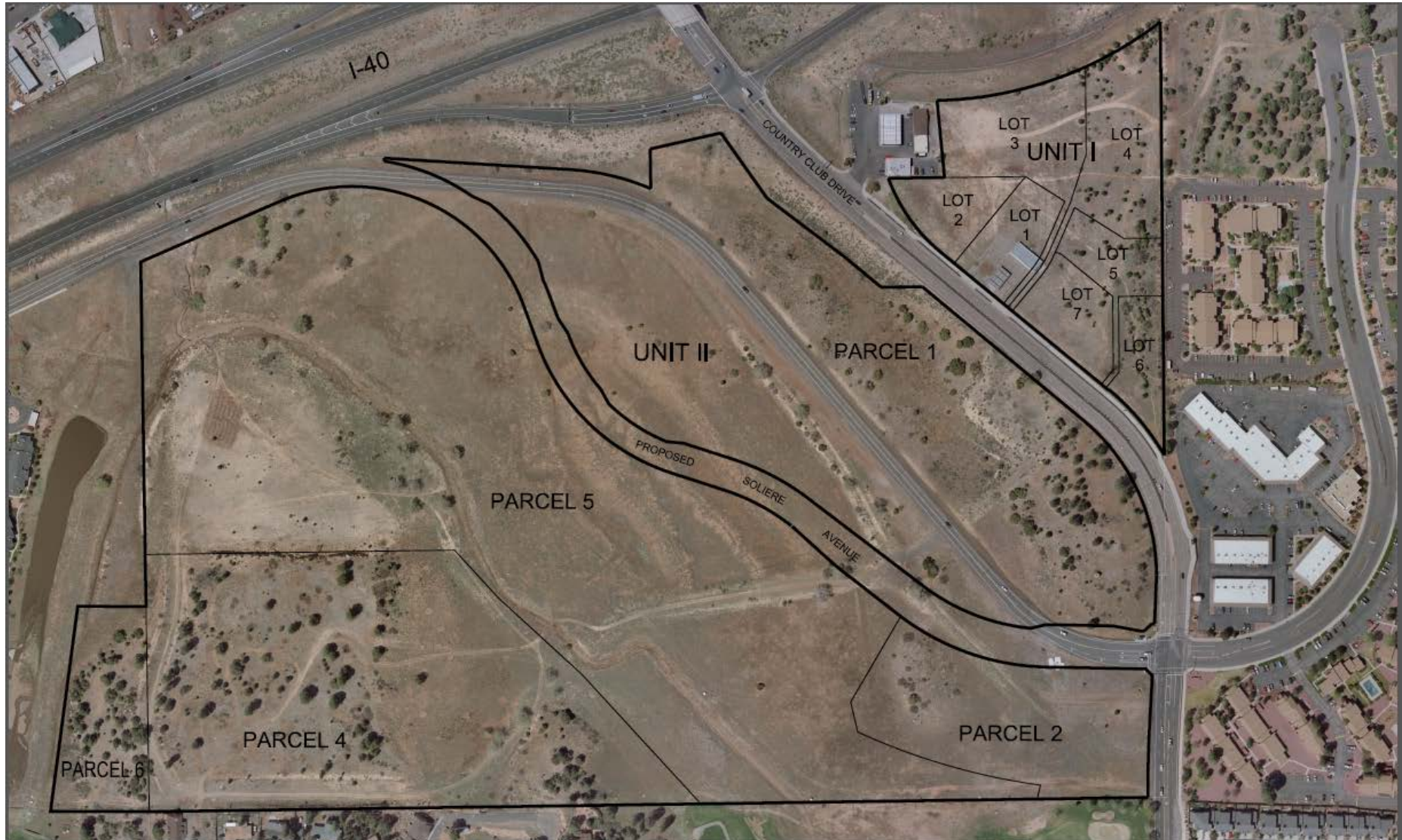
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Country Club – I-40



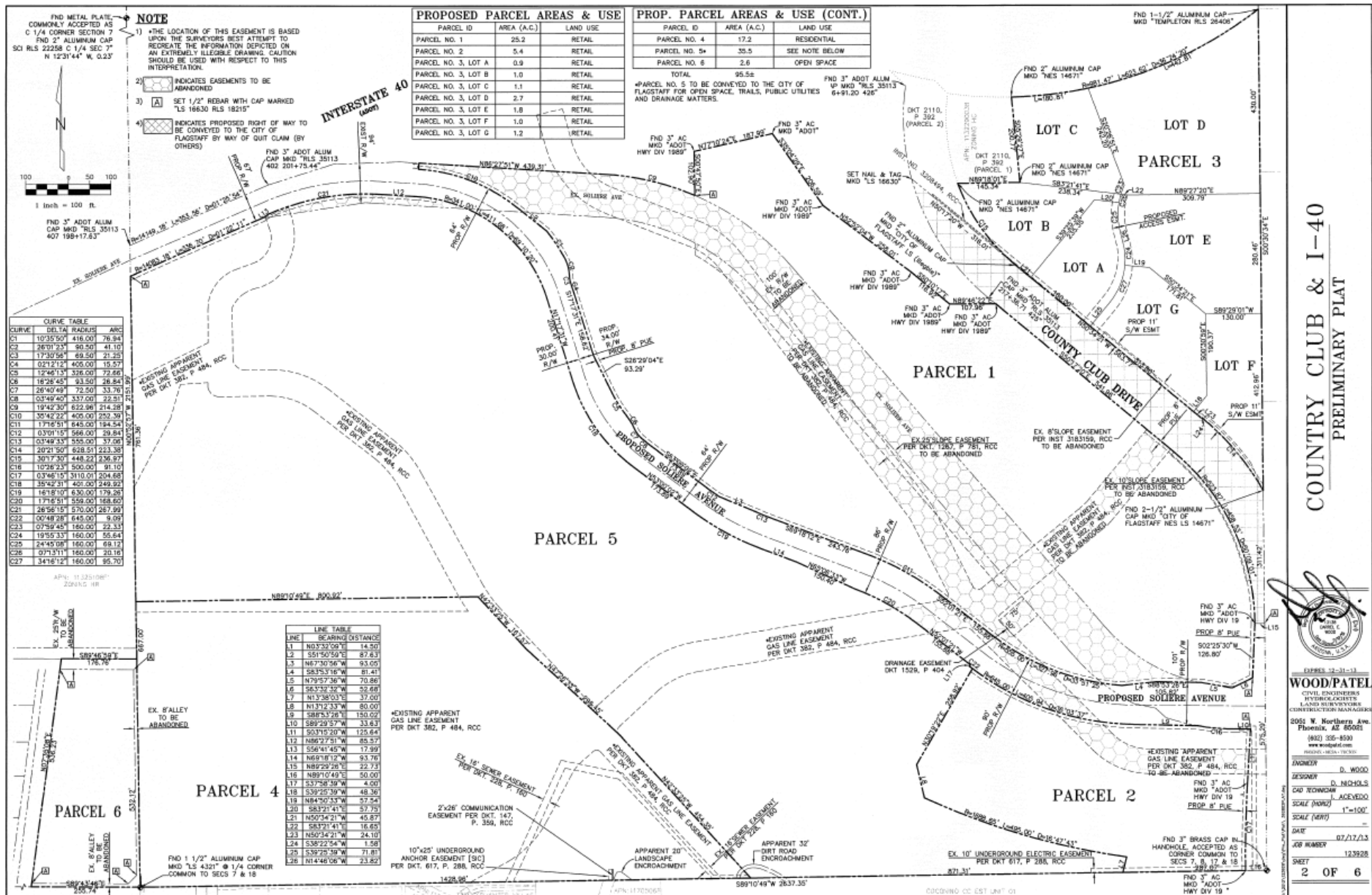
Country Club – I-40



Country Club – I-40



Country Club – I-40





ARS and Required Findings

- Development would not happen without this assistance.
- Project creates more revenue than incentive (3rd party analysis).
 - Rounds Consulting Group, Inc.





ARS and Required Findings

- Incentive must not violate the Gift Clause.





Specific Project Benefits

Improved road value on Soliere Avenue.

- Savings from not doing the pavement overlay.
- Financial value of street improvements.
- Unit 5 as City property for floodplain.
- No actual value from a circulation or safety perspective (50 year modeling).





Specific Project Benefit

Improved drainage

- Dedication of drainage land and improvements.
- Improvements beyond City's plan.





Considerations

- Preliminary Plat may be coming in for reconsideration and those changes could have some impact on Unit 5.





Consideration

- The City has no proportionate share for the road realignment.
 - Traffic Impact Analysis
- Drainage improvements are planned and funded in the Capital Improvement Plan.
- Truly a policy decision to incentivize economic growth of Flagstaff.





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Question

During the previous discussion, Council asked which, if any, of the proposed improvements related to the project is the City already planning on doing.

- Soliere overlay





- Services to the area
- Sales tax revenue
- Property tax
- Utilized infill
- Jobs availability





Wrap Up

- Incentives may help address infrastructure blockages that exist in the community.
- This generates or accelerates creation of jobs, services, property tax, and sales tax.





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Wrap Up

- Can benefit new retailers over others who are already contributing.
- Involves government where we have been cautious to take a role previously – development has paid its way and accepts the risk.





Conclusion

- This is a policy decision about whether to accelerate growth utilizing this tool.
- Infrastructure costs can be a major impediment to development.

